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*Edward J. Miers*

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*23<sup>rd</sup> May 1877.*

# CATALOGUE

OF

# BRITISH FOSSIL CRUSTACEA,

WITH

## THEIR SYNONYMS

AND THE

RANGE IN TIME OF EACH GENUS AND ORDER.

BY

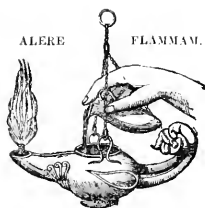
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OF THE DEPARTMENT OF GEOLOGY, BRITISH MUSEUM.

LONDON:

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## PREFACE.

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THE want of a Catalogue of British Fossil Crustacea, in which all the synonyms should be given, has long been felt.

The present task was commenced some years since ; but, owing to the unsatisfactory state of one group, the Bivalved Entomostraea, which greatly needed revision, the work was for some time laid aside for other and more pressing occupations.

Mr. Woodward completed this Catalogue on 22nd December, 1876 ; and it is but fair to him to state that he could only devote a small portion of his official time to this work, having to attend to the ordinary business connected with the Department, and also to catalogue the large accessions to the Fossil Invertebrata.

Some idea may be formed of the progress of palæontological work in this country from the fact that when Prof. Morris's Catalogue of British Fossils was published in 1854, he recorded only 81 genera and 306 species of Fossil Crustacea.

The present Catalogue contains a record of 197 genera, and 1051 species and varieties found fossil in Britain ; so that, since 1854, 116 new genera, and 745 new species and varieties of Fossil Crustacea have been figured and described in Britain.

GEO. R. WATERHOUSE.

British Museum,  
Department of Geology,  
January 10, 1877.



## INTRODUCTION.

With the exception of one doubtful organism (the *Eozoon Canadense*) not met with in the oldest known British Sedimentary rocks, the fossil representatives of the class CRUSTACEA take rank in antiquity amongst the earliest known organic remains.

From the recently discovered *Pre-Cambrian* rocks of St. David's, Pembrokeshire (the "Dimetian" and "Pebidian" formations) no organic remains of any kind have been obtained; the Lower Cambrian series, however, have yielded to the labours of Mr. Henry Hicks, F.G.S., and others, remains of MOLLUSCOIDA, ANNELIDA, and CRUSTACEA.

Of the thirteen Orders, enumerated in the Table at page viii, *two only* (printed in *Italics*) are extinct, namely the TRILOBITA and the EURYPTERIDA, and three are not represented in a fossil state, viz. the CLADOCERA, the COPEPODA, and the RHIZOCEPHALA.

The small Table below is intended to show at a glance the earliest appearance in time (so far as we have been enabled to ascertain it) of each order, and its recurrence in each successive formation.

[illegible]

**BRACHYURA.**—The oldest known Crab is the *Paleinachus longipes*, H. Woodw., from the Forest Marble (Great Oolite), Wilts. The Crabs are well represented from the Jurassic period to the present day, when they attain their maximum development within the warm, temperate, and sub-tropical latitudes, where land, freshwater, and marine species abound.

**ANOMURA.**—The Anomura embrace forms of Decapoda both related to the Brachyura (*e.g.* *Dromia*, *Porcellana*, *Dorippe*, &c.) and to the Macrura (*e.g.* *Pagurus*, *Galathea*, *Munida*). Their earliest appearance is in the Cretaceous period. Numerous species of land and marine Anomura are found within the tropics; and the marine species occur very widely distributed in the colder seas of the globe.

**MACRURA.**—Of this division of the DECAPODA a single species, the *Anthropalemon Grossartii*, occurs in the Coal-measures, and is well represented from the Trias to the present day. There are abundant freshwater and marine, but no land-dwelling Macrura.

**STOMAPODA.**—One species (the *Pygocephalus Huxleyi*, H. Woodw.), from the Coal-measures, is probably referable to this division. True *Squilla* and *Mysis*-like Crustaceans occur in the Jurassic rocks. They are most abundant in our modern seas.

**ISOPODA.**—The remains of a single species of Isopod, *Prææreturus gigas*, H. Woodw., have been obtained from the Old Red Sandstone of Herefordshire; and other representatives occur in the Carboniferous and Secondary rocks. The ISOPODA are most widely distributed over land and sea today: terrestrial, freshwater, and marine species abound.

**TRILOBITA.**—This extinct order ranges from the Lower Cambrian to the Carboniferous Series, more than 300 British species being described, and in Bohemia 350 species have been named and figured by Barrande alone. The great *Paradoxides Davidis* measures nearly 2 feet in length. As this group ascends in time, we find the extravagantly ornamented and spinose forms, such as *Paradoxides* and *Acidaspis*, disappear; and only three genera survive in the Carboniferous, small in size, and very regular and neat in form, especially the genus *Griffithides*.

**AMPHIPODA.**—The order Amphipoda has one representative in the Upper Silurian (the *Necrogammarus Salweyi*, H. Woodw.): it is represented by *Gamponyx* in the Coal of Rhenish Prussia, and by the genus *Prosoponiscus* in the Permian of Durham. Other (Secondary) species occur in Bavaria &c. The living genera of Amphipoda are abundant, both marine and freshwater; and some species are even terrestrial in their habits.

**XIPHOSURA.**—The earliest representative of the King-Crabs known is the *Neolinulus falcatus*, H. Woodw., from the Upper Silurian of Lanarkshire; several species are met with in the Coal-measures, and are very widely distributed. The genus is represented largely in the Oolite of Bavaria, and is also found living today in both the Old and New World.

**EURYPTERIDA.**—The EURYPTERIDA, like the TRILOBITA, are an extinct order. They were represented in Devonian and Silurian times by genera which attained a length of from 5 to 6 feet. They were nearly related to the King-Crabs in structure, but differed in their development as do the Lobsters from the Crabs at the present day—the XIPHOSURA representing the Brachyuran, and the EURYPTERIDA the Macruran type.

**PHYLLOPODA.**—The Phyllopoda are represented from the Middle Cambrian to the Tertiary period by many genera. Large extinct forms, closely resembling the little modern *Nebalia bipes*, were abundant in the Upper Silurian of Ludlow and Lanark. They are represented today by species in fresh water, brackish water, salt water, and highly saline salterns and lakes.

**OSTRACODA.**—The Bivalved Entomostraca included in this order are largely represented throughout the entire series of stratified rocks, from the Lower Cambrian to the present day; they are equally well represented in a recent state. They not unfrequently (as in the *Cypripis* shales of the Wealden) make up entire strata with their accumulated valves.

**CIRRIPEDIA.** (*a*) **BALANIDÆ.**—The oldest fossil sessile Cirripede is the *Pyrgoma cretacea*, H. Woodw., from the Upper Chalk of Norwich.

(*b*) **LEPADIDÆ.**—The oldest known pedunculated Cirripede is the *Turritilepas Wrightii*, H. Woodw., from the Upper Silurian of Dudley. None have been met with lower than the Lias, except *Turritilepas*; but from the Lias upwards, sessile forms are well represented.

The group is abundant and cosmopolitan in all the seas of the world, parasitic on all objects, living and dead.

The subjoined Table (p. viii) gives the number of genera, species, and varieties belonging to each order and suborder in the class Crustacea.

HENRY WOODWARD.

Department of Geology,  
December 22, 1876.

## CLASS CRUSTACEA.

## Subclass I. THORACIPODA, H. Woodw. (or MALACOSTRACA).

## Legion 1. PODOPHTHALMIA.

Order 1. **Decapoda**.

Suborder (a) <b>BRACHYURA</b> .....	27	41	
„ (b) <b>ANOMURA</b> .....	2	3	
„ (c) <b>MACRURA</b> .....	22	52	

Order 2. <b>Stomapoda</b> .....	2	4	
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## Legion 2. EDRIOPHTHALMIA.

Order 3. <b>Isopoda</b> .....	3	3	
„ 4. <i>Trilobita</i> .....	51	304	18
„ 5. <b>Amphipoda</b> .....	1	1	

## Subclass II. GNATHOPODA, H. W. (or ENTOMOSTRACA).

## Legion 3. MEROSTOMATA.

Order 6. <b>Xiphosura</b> , and <b>CYCLUS</b> (?) .....	4	16	
„ 7. <i>Eurypterida</i> .....	5	36	4

## Legion 4. BRANCHIOPODA.

Order 8. <b>Phyllopoda</b> .....	12	55	6
„ 9. <b>Cladocera</b> .			

## Legion 5. LOPHYROPODA.

Order 10. <b>Ostracoda</b> .....	55	413	41
„ 11. <b>Copepoda</b> .			

## Legion 6. ANCHORACEPHALA.

Order 12. **Rhizocephala**.„ 13. **Cirripedia**.

(a) <b>BALANIDÆ</b> .....	5	18	
(b) <b>LEPADIDÆ</b> .....	4	29	3

Crustacean "Teeth," Eggs, and "Tracks" .....	4	4	
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197	979	72
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## LIST OF PRINCIPAL WORKS REFERRED TO.

### ENGLISH PUBLICATIONS.

- Ann. & Mag. Nat. Hist.*—Annals and Magazine of Natural History : 1839–1847, vols. i.–xx. ; 2nd series, 1848–1857, vols. i.–xx. ; 3rd series, 1858–1867, vols. i.–xx. ; 4th series, 1868–1876, vols. i.–xvii.
- Baird, Brit. Entom.*—Baird's British Entomostraca. 1850. 8vo. Published by the Ray Society.
- Brady, Mon. Rec. Brit. Ostr. Trans. Linn. Soc.*—Monograph of the Recent British Ostracoda, by G. S. Brady, in the Transactions of the Linnean Society, vol. xxvi. 1868. 4to.
- Brodie's Foss. Insects.*—Fossil Insects in the Secondary Rocks of England. 1845. 8vo. By the Rev. P. B. Brodie, F.G.S.
- Buckland, Bridg. Treat.*—Buckland's Bridgewater Treatise. 1836. 8vo.
- Cat. Brit. Foss.*—Catalogue of British Fossils, by John Morris. 1854. 8vo.
- Cat. Camb. & Sil. Foss.*—Catalogue of Cambrian and Silurian Fossils, Woodwardian Museum, by J. W. Salter. 1873. 4to.
- Cat. & Chart Foss. Crust.*—Catalogue and Chart of Fossil Crustacea, by J. W. Salter and H. Woodward. 1865.
- Cat. West. Scot. Foss.*—Catalogue of the Western Scottish Fossils, by J. Armstrong, J. Young, and D. Robertson. 1876. 12mo.
- Decade Geol. Surv.*—Decades of the Geological Survey, Nos. ii., vii., and xi. 1849–1864.
- Dixon, Geol. Sussex.*—Dixon's Geology of Sussex: Crustacea, by Prof. Bell. 1850. 8vo.
- Duff, Geol. Moray.*—Sketch of the Geology of Moray, by P. Duff. 1842. 8vo.
- Edinb. Journ. Nat. Sci.*—Edinburgh Journal of Natural and Geographical Science. 1829–1830. 8vo.
- Geologist.*—The Geologist, a Monthly Magazine. 1858–1864, vols. i.–vii. 8vo.
- Geol. Mag.*—The Geological Magazine, continuation of the Geologist. 8vo. 1864–1873, vols. i.–x. ; 1874–1876, decade ii. vols. i.–iii.
- Icon. Foss. Sect.*—Icones Fossilium Sectiles, by C. König. 1820. 4to.
- Journ. Geol. Soc. Dublin.*—Journal of the Geological Society of Dublin. 8vo.
- Lyell, Elem. Geol.*—Elements of Geology, by Sir Charles Lyell: 1838, 1 vol. 12mo; 2nd edit. 1842, 2 vols. 12mo; 3rd edit. 1851, 1 vol. 8vo; 4th edit. 1852, 1 vol. 8vo; 5th edit. 1855, 1 vol. 8vo; 6th edit. 1865, 1 vol. 8vo.
- Lyell, Stud. Elem.*—Student's Elements, 1871, 1 vol. 12mo; 2nd edit. 1874, 1 vol. 12mo.
- Mant. Geol. Sussex.*—Fossils of the South Downs, being Illustrations of the Geology of Sussex, by G. A. Mantell. 1822. 4to.
- Mant. Medals.*—Medals of Creation, by G. A. Mantell. 1854. 8vo.
- McCoy, Syn. Carb. Foss.*—Synopsis of the Characters of the Carboniferous Fossils of Ireland, by F. McCoy. 1844. 8vo.
- McCoy, Pal. Foss. Woodw. Mus.*—Palæozoic Fossils in the Geological Museum of the University of Cambridge, by F. McCoy. 1851–1855. 4to.

- M'Coy, Sil. Foss. Irel.*—Synopsis of the Silurian Fossils of Ireland, by F. M'Coy. Dublin, 1846. 4to.
- Mem. Geol. Surv.*—Memoirs of the Geological Survey of England and Wales. 8vo. 1846–1866, vols. i.–iii.
- Mon. Pal. Soc.*—Monographs of the Palaeontographical Society. 4to.
- Bell, Prof., 1856, Fossil Crustacea of London Clay, pt. 1; 1860, Fossil Crustacea of the Gault and Greensand, pt. 2.
- Brady, G. S., 1874, assisted by H. W. Crosskey and D. Robertson; The Post-Tertiary Entomostraca.
- Jones, T. R., 1849, Entomostraca of the Cretaceous Formations; 1849, Entomostraca, in King's Permian Fossils, pp. 58–66; 1855, Tertiary Entomostraca; 1860, Fossil Estheriæ; 1874, Carboniferous Entomostraca, pt. 1, assisted by J. W. Kirkby and G. S. Brady.
- Salter, J. W., 1862, Trilobites of the Silurian, Devonian, &c. Formations, pt. 1; 1863, pt. 2; 1864, pt. 3; 1866, pt. 4.
- Woodward, Henry, 1865, The Fossil Merostomata, pt. 1, *Pterygotus*; 1868, pt. 2, *Pterygotus*; 1871, pt. 3, *Pterygotus* and *Slimonia*; 1872, pt. 4, *Stylonurus*, *Eurypterus*, *Hemiaspis*.
- M. Mier. Journ.*—Monthly Microscopical Journal. 8vo.
- Murchison's Geology of Cheltenham.* 1845, 2nd edit. 8vo.
- Murch. Sil. Syst.*—The Silurian System, founded on Geological Researches, &c., by Sir R. I. Murchison. 1839. 4to.
- Murch. Siluria.*—Siluria, by Sir R. I. Murchison, 2nd edit. 1854, 8vo. 3rd edit. 1859, 8vo. 4th edit. 1867, 8vo.
- Park. Org. Rem.*—Organic Remains of a former World, by J. C. Parkinson. 1811. 4to.
- Phillips, Geol. York.*—Illustrations of the Geology of Yorkshire, by John Phillips, F.R.S. 1829 & 1835, last edit. 1875.
- Phillips, Pal. Foss.*—Palaeozoic Fossils of Cornwall, Devon, and West Somerset, by John Phillips. 1841. 8vo.
- Phil. Trans.*—Philosophical Transactions of the Royal Society. 4to.
- Portlock, Geol. Rep. Tyrone.*—Geological Report of Londonderry and Tyrone, by J. E. Portlock, F.R.S. 1843. 8vo.
- Proc. Brit. Assoc.*—Report of Proceedings of the British Association for the Advancement of Science. 1832–1876. 8vo.
- Proc. Geol. Assoc.*—Proceedings of the Geologists' Association. 1859–1876. 8vo.
- Proc. Roy. Geol. Soc. Irel. Dublin.*—Proceedings Royal Geological Society of Ireland, Dublin.
- Proc. Zool. Soc. Lond.*—Proceedings of the Zoological Society of London. 8vo.
- Quart. Journ. Geol. Soc. Lond.*—Quarterly Journal of the Geological Society of London. 8vo. 1845–1876, vols. i.–xxxii.
- Sby. Min. Con.*—Sowerby's Mineral Conchology. 8vo. 1812–1829, 6 vols.
- Trans. Berw. Nat. Club.*—Transactions of the Berwickshire Naturalists' Club, vols. i.–iii. 1852.
- Trans. Geol. Soc. Glasgow.*—Transactions of the Geological Society of Glasgow. 8vo.
- Trans. Geol. Soc.*—Transactions of the Geological Society of London. 4to. 1824–1841, vols. i.–vi.
- Trans. Nat. Hist. Northumb.*—Transactions of the Natural-History Society of Northumberland and Durham. 8vo.
- Trans. Tynes. Nat. Field-club.*—Transactions of the Tyneside Naturalists' Field-club.
- White, Pop. Hist. Brit. Crust.*—Popular History of British Crustacea, by Adam White. 1857. 8vo.
- Woodw., II., in Nat. Hist. Soc. Somerset.*—Proceedings of the Somersetshire Archaeological and Natural-History Society. 1865–66. 8vo.
- Woodw., II., in Trans. Woolhope Club.*—Transactions of the Woolhope Field-Naturalists' Club. 1870. 8vo.

## REFERENCES TO FOREIGN PUBLICATIONS.

- Agassiz, Poiss. Foss.*—Poissons Fossiles du Vieux Grès-rouge ou Système Dévonien. 1844. 4to.
- Angelin, Pal. Succ.*—Palæontologia Suecica. Part I. Crustacea formationis transitionis. 1854, plates 1-41. 4to.
- Ann. des Sciences Nat.*—Annales des Sciences Naturelles. 8vo. Paris, 1824-76.
- Barrande, Syst. Sil. Bohm.*—Système Silurien de la Bohême, vol. i. Trilobita. Par Joachim Barrande. Prague et Paris, 1852. 52 plates. 4to.  
Supplément au vol. i. Trilobites, Crustacés divers et Poissons. 1872. 4to.
- Beyrich, Unter. üb. Trilob.*—Untersuchungen über Trilobiten. By Ernst Beyrich. Berlin, 1846. 4to.
- Binkhorst, J. T. v.*, Monographie des Crustacés fossiles des Terrains Crétacées du Limbourg. 1853.  
Neue Kriebse aus der Maestricthe Kreide (mit 2 Taf.), in Verhandl. d. naturh. Ver. d. preuss. Rheinlande, 1857, pp. 107-110.
- Boeck, Ueb. Norw. Trilobit.*—Uebersicht der bisher in Norwegen gefundenen Trilobiten. Keilhau, Gaea Norwegica. By Chr. Boeck. 1838.
- Brocchi, Conch. Subap.*—Conchiologia fossile subapennina, con osservazioni geologiche sugli Apennini e sul suolo adjacente. By G. B. Brocchi. Milano, 1814-1843, 2 vols. 4to.
- Brong. Hist. Nat. Crust.*—Histoire Naturelle des Crustacés Fossiles, par A. Brongniart. Paris, 1822. 4to.
- Bullet. Acad. Roy. Belg.*—Bulletins de l'Académie Royale des Sciences de Belgique, 1834-76.
- Bullet. Soc. Géol. Fr.*—Bulletins de la Société Géologique de France. Paris.
- Burmester, H.*, The Organization of Trilobites deduced from Living Affinities, with a Systematic Review of the Species hitherto described. 4to. Pp. 136. Ray Society, 1846. Edited from the German by Prof. Bell and Prof. E. Forbes.
- Canad. Nat. & Geol.*—The Canadian Naturalist and Geologist. Montreal.
- Corda, Böhm. Trilob. Prodr.*—Prodrom einer Monographie der böhmischen Trilobiten, von J. Hawle und A. J. C. Corda. Prag, 1847. 4to.
- Dalman, J. W.*, Om Palæaderna eller de så kallade Trilobiterna, in K. Vet. Akad. Händl. Stockholm, 1826.
- Dana, Jas. D.*—Crustacea: vols. xiii. & xiv., 4to; Atlas, folio. United-States Exploring Expedition, under Commander Wilkes. 1852.
- De Kay, Dr. J. E.*, on *Eurypterus*. Annals of the Lyceum of Natural History, New York, 1825.
- Egger, John Geo.*, Die Ostracoden der Miocen bei Ortenberg in Nieder-Bayern. Stuttgart, 1858.
- Emmrich, H. F.*, De Trilobitis dissertatio petrifactis. Berolini, 1839.  
On the Morphology, Classification, and Distribution of Trilobites, in Taylor's Scientific Memoirs, 1846, vol. iv. p. 253.
- Fisher, Seb.*, Ueber das Genus *Cypris* bei Petersburg und Reval. Mémoires présentés par divers savants à l'Académie Imp. des Sciences de Saint-Petersbourg, tom. vii. 1854. 11 plates.
- Goldfuss, J. A.*, Petrefacta Germaniæ in Museis Hoeninghusiano, Münsteriano, etc. Dusseldorf, 1826-33. Fol.
- Green, Mon. Tril. N. Amer.*—Green Jacob, Monography of the Trilobites of N. America, with coloured models of the species. Philadelphia, 1833. 8vo.
- Haidinger's* Abhandlungen des zoologisch-mineralogischen Vereines in Regensburg, 1849-56.
- Hall, J.*, *Pal. New York.*—Palæontology of New York, by James Hall. 4to. 1852.

- Jahres. wetter. Gesell.*—Jahresbericht der wetterauischen Gesellschaft, etc. König: Hanan, 1850–58.
- Jahrb. f. Min.*—Jahrbuch für Mineralogie und Geologie, Neues. Leonhard u. Geinitz.
- Jurine, L.*, Histoire des Monocles qui se trouvent aux environs de Genève. Geneva, 1820. 4to.
- Koch, Deutsch. Crust.*—Koch, C. L. Deutschlands Crustaceen, Myriapoden und Arachniden. Leipzig, 1835–42.
- Kon. Descript. An. Foss.*—Koninek (L. de), Description des Animaux fossiles qui se trouvent dans le Terrain Houiller de Belgique. Liège, 1842. 4to. 2 vols. 55 plates.
- Lamarck, J. B. de*, Histoire naturelle des Animaux sans vertèbres, etc. Paris, 1815–1822, 7 vols., 8vo. 2nd edit. Paris, 1835–1843, 10 vols., 8vo.
- Lilljeborg, Wilhelm*, De Crustaceis ex ordinibus tribus: Cladocera, Ostracoda, et Copepoda in Scania occurrentibus. Leipzig, 1853. 8vo.
- Linnaeus, Carl*, Systema Naturæ. Halæ, Magd. 1747. 8vo.
- Martin, W.*, Petrificata Derbyensia; or Figures and Descriptions of Petrifications collected in Derbyshire. Wigan, 1809. 4to.
- Mém. Acad. Roy. Belg.*—Mémoires de l'Académie Royale des Sciences de Belgique. Bruxelles, 1847–1876.
- Mém. Soc. Linn. Calv.*—Société Linnéenne du Calvados. Mémoires, 1825–1875. 8vo.
- Mém. Soc. Linn. Norm.*—Mémoires de la Société Linnéenne de Normandie, 1826–1858.
- Mém. Soc. Roy. Liège.*—Mémoires de la Société Royale des Sciences de Liège, 1843–1876.
- Meyer, Hermann von*, Neue Gattungen fossiler Krebse. Stuttgart, 1840. 4to.
- Milne-Edwards, Alphonse*, Histoire des Crustacés Podophthalmaires Fossiles, tom. i. Paris, 1861–65.
- Milne-Edwards, Henri*, Histoire naturelle des Crustacés, comprenant l'anatomie, la physiologie et la classification de ces animaux. Paris, 1837–40, 3 vols. 8vo, et atlas.
- Müller, O. F.*—Entomostraca, Zoologiæ Danicæ Prodromus. Hafn. 1776. 8vo.
- Münst. Beitr. Petref.*—Beiträge zur Petrefaktenkunde von Georg Graf zu Münster. Heft II. Bayreuth, 1839. 4to. Fossilen Krebse von Bayern.
- Murch. Geol. Russ.*—Géologie de la Russie d'Europe et des Montagnes de l'Oural, par Roderick I. Murchison, E. de Verneuil, et A. de Keyserling. Vol. ii. Paléontologie. 1845. 4to.
- Neues Jahrb.*—Neues Jahrbuch für Mineralogie und Geologie.
- Nor. Act. Soc. Sci. Upsal.*—Nova Acta Regiæ societatis scientiarum Upsaliensis, 1773–1876. Upsaliæ.
- Nov. Act. Acad. Nat. Cur.*—Nova Acta physico-medica Academiae Cæsareæ Leopoldino-Carolinæ Naturæ Curiosorum. Norimbergæ, 1727–1876.
- Oppel, Pal. Mith.*—Oppel Dr. A., Palæontologische Mittheilungen. Stuttgart, 1862. I. Ueber Jurassische Crustaceen, plates 1–38.
- Palæontographica.* Beiträge zur Naturgeschichte der Vorwelt. Herausgegeben von Wilh. Dunker und Hermann von Meyer, Bd. i.–xx. 1851–1875.
- Sandberger, Drs. G. & F.*, Die Versteinerungen des rheinischen Schichtensystems in Nassau. Wiesbaden, 1850–56. 4to.
- Sill. Amer. Journ.*—Silliman's American Journal of Science and Art. New-haven, Connecticut, U. S. A.
- Zenker*, Anatomisch-systematische Studien über die Kresthiere. Berlin, 1854. 8vo.

# CATALOGUE

## OF THE

# BRITISH FOSSIL CRUSTACEA.

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### Order I. DECAPODA.

#### Suborder 1. BRACHYURA.

#### CAMPYLOSTOMA, Bell, 1857.

*Campylostoma*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 23; H. Woodw. & Salter, 1865, Cat. & Chart Crust. p. 3.

*Distribution.* London Clay.

**Campylostoma matutiforme**, Bell. London Clay, I. of Sheppey.

*Campylostoma matutiforme*, Bell, Mon. Pal. Soc. 1857, Crustacea, pt. 1, p. 23, pl. iii. figs. 8-10; H. Woodw. & Salter, 1865, Cat. & Chart Crust. p. 3.

#### CYCLOCORYSTES, Bell, 1857.

*Cyclocorystes*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 24.

*Distribution.* London Clay.

**Cyclocorystes pulchellus**, Bell. London Clay, Holloway.

*Cyclocorystes pulchellus*, Bell, Mon. Pal. Soc. 1857, pt. 1, Crustacea, p. 24, pl. iv. figs. 1, 2.

#### CYPHONOTUS, Carter, MS., Bell, 1862.

*Cyphonotus*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 8.

*Distribution.* Upper Greensand.

**Cyphonotus incertus**, Bell, 1862. Upper Greensand, Wiltshire and  
Cambridge.

*Cyphonotus incertus*, Bell, 1862, Mon. Pal. Soc. Crust. pt. 2, 1862, p. 8, pl. i. figs. 17-19; H. Woodw. & Salter, Chart Foss. Crust. "fig. 17" (1865).

#### DIAULAX, Bell, 1862.

*Diaulax*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 6.

*Distribution.* Upper Greensand.

**Diaulax Carteriana**, Bell, 1862. Upper Greensand, Cambridge.

*Diaulax Carteriana*, Bell, 1862, Mon. Pal. Soc. Crust. pt. 2, p. 2, t. i. fig. 1;  
H. Woodw. & Salter, 1865, Cat. & Chart Fossil Crust. p. 2, fig. 18.

**Diaulax feliceps**, H. Woodw. Gault, Folkestone.

*Diaulax feliceps*, H. Woodw. 1873, Brit. Assoc. Reports, p. 306.

### **EUCORYSTES**, Bell, 1862.

*Eucorystes*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 17.

*Distribution.* Upper Greensand.

**Eucorystes Carteri**, sp., M'Coy. Upper Greensand, Cambridge.

*Eucorystes Carteri*, sp., M'Coy, Contrib. to Brit. Palæontol. 1854, p. 269,  
pl. fig. 3; Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 17, pl. ii. figs. 14-17.

**Eucorystes Carteri**, var. *a*, Bell. *op. cit.* p. 39, pl. xi. fig. 16.

### **ETYUS**, Leach, 1818.

*Etyus*, Mantell, 1822, Geol. of Sussex; Bell, 1862, Mon. Pal. Soc. pp. 6 & 39.

*Reussia*, M'Coy, 1854, Ann. & Mag. Nat. Hist. 2nd ser. vol. xiv. p. 120.

*Distribution.* Gault and Greensand.

**Etyus Martini**, Mantell. Gault, Folkestone, Ringmer, Sussex;  
Greensand, Cambridge.

*Etyus Martini*, Mantell, Medals of Creation, 1844, p. 322, fig. 1; 1854, 2nd  
edit. vol. ii. p. 513, fig. 1; Geol. S.E. of England, p. 169, fig. 1.

*Reussia granosa*, M'Coy, Ann. & Mag. Nat. Hist. 1854, 2nd ser. vol. xiv.  
p. 121; Contr. to Brit. Palæont. p. 271, fig. 4; Mon. Pal. Soc. 1862,  
Crustacea, pt. 2, p. 5, pl. i. figs. 7-12.

**Etyus similis**, Bell. Upper Greensand, Cambridge.

*Etyus similis*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, pp. 6 & 39, pl. i. fig.  
12, and pl. xi. fig. 15.

### **GONIOCHELE**, Bell, 1857.

*Goniochele*, Bell, 1857, Mon. Pal. Soc. pt. i. p. 25.

*Distribution.* London Clay.

**Goniochele angulata**, Bell. London Clay, Sheppey.

*Goniochele angulata*, Bell, Mon. Pal. Soc. 1857, Crustacea, pt. 1, p. 26, pl. iv.  
figs. 3-9; Salter & H. Woodward, Chart & Cat. Foss. Crust. 1865, p. 3,  
fig. 39.

### **HEMIOÖN**, Bell, 1862.

*Hemioön*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 10.

*Distribution.* Upper Greensand.

**Hemioön Cunningtoni**, Bell, 1862. Upper Greensand, Cambridge  
and Wiltshire.

*Hemioön Cunningtoni*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 10, pl. ii.  
figs. 4-7.

**Hemioön vectensis**, H. Woodw. MS. 1873. Greensand, I. of Wight.

*Hemioön*, sp. nov., H. Woodw. 1873, Brit. Assoc. Rep. p. 307; Geol. Mag. 1873, vol. x. p. 524.

**GONIOCYPODA**, H. Woodward, 1867.

*Cyclograpsus*, 1865, H. Woodw. & Salter, Cat. & Chart Foss. Crust. p. 4.

*Goniocypoda*, 1867, H. Woodw. Geol. Mag. vol. iv. p. 529.

*Distribution*. Lower Eocene.

**Goniocypoda Edwardsi**, H. Woodw. 1867. Lower Eocene, Hampshire.

*Goniocypoda Edwardsi*, H. Woodw. 1867, Geol. Mag. vol. iv. p. 529, pl. xvi. fig. 1.

*Cyclograpsus*, 1865, H. Woodw. & Salter, Cat. & Chart Fossil Crust. p. 4, fig. 50.

**LITORICOLA**, H. Woodward, 1873.

*Litoricola*, H. Woodw. 1873, Quart. Journ. Geol. Soc. p. 28.

*Distribution*. Eocene.

**Litoricola dentata**, H. Woodw. 1872. Lower Eocene, Portsmouth.

*Litoricola dentata*, H. Woodw. 1872, Geol. Mag. vol. ix. p. 566; Quart. Journ. Geol. Soc. 1873, vol. xxix. pl. ii. figs. 2-5, p. 30; Brit. Assoc. Reports, 1872, p. 324.

**Litoricola glabra**, H. Woodw. 1872. Lower Eocene, Portsmouth.

*Litoricola glabra*, H. Woodw. Geol. Mag. 1872, vol. ix. p. 566; Quart. Journ. Geol. Soc. 1873, vol. xxix. pl. ii. fig. 1; Brit. Assoc. Reports, 1872, p. 324.

**NECROCARCINUS**, Bell, 1862.

*Orithyia*, Deslongch. 1836, Mém. Lin. Soc. Norm. vol. v. p. 40.

*Arcania*, Leach; Buckland, 1844, Med. of Creat. p. 534.

*Notopocorystes*, Morris, Cat. p. 111.

*Necrocarcinus*, Bell, 1862, Mon. Pal. Soc. p. 19.

*Distribution*. Cretaceous.

**Necrocarcinus Bechei**, sp., Deslongch. 1836. Gault, Folkestone; Upper Greensand, Cambridge.

*Orithyia Bechei*, Deslongch. 1836, Mém. Soc. Lin. Norm. v. p. 40, t. 1, figs. 7-9.

*Arcania Bucklandi*, Mant. 1844, Med. Cr. p. 534. Geol. Sussex, t. 29, figs. 7, 8, 14; Mant. Geol. S.E. Engl. p. 159, fig. 3.

*Notopocorystes Bechei*, Morris, Cat. p. 111; Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 20, pl. iv. figs. 4-8.

**Necrocarcinus tricarinatus**, Bell. Upper Greensand, Cambridge, Wiltshire, and Lyme Regis, Dorset.

*Necrocarcinus tricarinatus*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 21, pl. iv. figs. 9-11.

**Necrocarcinus Woodwardi**, Bell. Chalk Marl, St. Lawrence, Isle of Wight; Upper Greensand, Warminster and Maiden Bradley, Wiltshire.

*Necrocarcinus Woodwardi*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 20, pl. iv. figs. 1-3.

**NECROZIUS**, Milne-Edw. 1865.

*Necrozius*, Milne-Edw. 1865, Ann. des. Scien. Nat. tom. xviii. 4<sup>e</sup> sér. p. 297.  
*Distribution*. Eocene.

**Necrozius Bowerbankii**, Alph. Milne-Edw. 1865. London Clay, Isle of Sheppey.

*Necrozius Bowerbankii*, Alph. Milne-Edw. 1865, Ann. des. Scien. Nat. tom. xviii. 4<sup>e</sup> sér. p. 297; H. Woodw. 1867, Geol. Mag. vol. iv. p. 531, pl. xxi. figs. 2, 3.

**ÆDISOMA**, Bell, 1857.

*Ædisoma*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 22.  
*Distribution*. Eocene.

**Ædisoma ambiguum**, Bell. London Clay, Sheppey.

*Ædisoma ambiguum*, Bell, Mon. Pal. Soc. 1857, pt. 1, p. 22, pl. iii. figs. 6, 7.

**ORITHOPSIS**, Carter, 1872.

*Necrocarcinus*, H. Woodw. 1868, Geol. Mag. vol. v. p. 259.  
*Orithopsis*, Carter, 1872, ib. vol. ix. p. 529.  
*Distribution*. Cretaceous.

**Orithopsis Bonneyi**, Carter. Upper Greensand, Lyme Regis ; Gault, Folkestone.

*Orithopsis Bonneyi*, Carter, Geol. Mag. 1872, vol. ix. p. 529, pl. xiii. fig. 1.  
*Necrocarcinus tricarinatus*, H. Woodw. 1868, Geol. Mag. vol. v. pl. xiv. fig. 4, p. 259.

**PALÆINACHUS**, H. Woodw. 1866.

*Palæinachus*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 494.  
*Protocarcinus*, Bell, MS., H. Woodw. & Salter, Cat. & Chart Foss. Crust.  
*Distribution*. Great Oolite.

**Palæinachus longipes**, H. Woodw. 1866. Forest Marble, Malmesbury, Wilts.

*Palæinachus longipes*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 494, pl. xxiv. fig. 1.  
*Protocarcinus longipes*, Bell, MS., in H. Woodw. & Salter's Cat. & Chart Foss. Crust. p. 2, fig. 15.

**PALÆOCORYSTES**, Edwards, Bell, 1862.

*Corystes*, Mantell, Medals of Creation, p. 532.  
*Notopocorystes*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 170.  
*Palæocorystes*, Bell, 1862, Mon. Pal. Soc. p. 15; H. Woodw. 1870, Quart. Journ. Geol. Soc. vol. xxvii. p. 90.  
*Distribution*. Gault to Eocene.

**Palæocorystes Broderipii**, Mantell. Gault, Folkestone and Maidstone ; Ringmer, Sussex.

*Corystes*, sp., Mantell, Geol. Suss. t. xxix. figs. 9, 10; Geol. S.E. Engl. p. 170.  
*Corystes Broderipii*, Mantell, 1854, Medals of Creation, p. 532, fig. 3.  
*Notopocorystes Broderipii*, Morris, 1854, Cat. p. 111.  
*Palæocorystes Broderipii*, Bell, 1862, Mon. Pal. Soc. p. 14, pl. ii. figs. 8-13.



**Palæocorystes glabra**, H. Woodw. 1870. Lower Eocene, Portsmouth.

*Palæocorystes glabra*, H. Woodw. Quart. Journ. Geol. Soc. 1871, vol. xxvii. pl. iv. figs. 1a, 1b, p. 90.

**Palæocorystes Normani**, Bell, 1862. Chalk Marl, Ventnor.

*Palæocorystes Normani*, Bell, 1862, Mon. Pal. Soc. p. 16, pl. iii. figs. 10-12.

**Palæocorystes Stokesii**, Mantell. Gault, Folkestone and Maidstone ;  
Upper Greensand, Cambridge.

*Corystes*, sp., Mantell, Geol. Suss. t. xxix. figs. 15, 16 ; Geol. S.E. Engl. p. 169, fig. 3.

*Corystes Stokesii*, Mantell, Medals of Creation. p. 532, fig. 2.

*Notopocorystes Mantelli*, McCoy, 1849, Ann. & Mag. Nat. Hist. p. 170.

*Notopocorystes Stokesii*, Morris, 1854, Cat. p. 111.

*Palæocorystes Stokesii*, Bell, 1862, Mon. Pal. Soc. p. 15, pl. iii. figs. 1-9.

### PLAGIOLOPHUS, Bell, 1857.

*Plagiolophus*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 19.

*Distribution*. London Clay.

**Plagiolophus Wetherelli**, Bell. London Clay, Sheppey and Southend.

*Plagiolophus Wetherelli*, Bell, Mon. Pal. Soc. 1857, Crustacea, pt. 1, p. 19, pl. ii. figs. 7-13.

### PLAGIOPHTHALMUS, Bell, 1862.

*Plagiophthalmus*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 9.

*Distribution*. Upper Greensand.

**Plagiophthalmus oviformis**, Bell. Upper Greensand, Wiltshire.

*Plagiophthalmus oviformis*, Bell, Mon. Pal. Soc. 1862, Crust. pt. 2, p. 9, pl. ii. figs. 1-3.

### PLATYPODIA, Bell, 1850.

*Platypodia*, Bell, 1850, Dixon's Geol. Sussex, p. 345.

*Distribution*. Lower Chalk.

**Platypodia Oweni**, Bell. Lower Chalk, Sussex.

*Platypodia Oweni*, Bell, Dixon's Geol. Sussex, p. 345, t. 38\*. fig. 9 ; H. Woodw. & Salter, 1865, Cat. & Chart Fossil Crust. p. 2, fig. 19.

### PORTUNITES, Bell, 1857.

*Portunites*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 20.

*Distribution*. London Clay.

**Portunites incerta**, Bell. London Clay, 1. of Sheppey.

*Portunites incerta*, Bell, Fossil Crustacea of London Clay, pt. 1, Mon. Pal. Soc. 1857, p. 21, pl. iii. figs. 1-5.

**PROSOPON**, H. v. Meyer, 1835.

*Prosopon*, H. v. Meyer, Jahrb. f. Miner. 1835; H. Woodw. 1868, Geol. Mag. vol. v. p. 3.

*Distribution*. Great Oolite.

**Prosopon mammillatum**, H. Woodw. 1868. Great Oolite, Stonesfield.

*Prosopon mammillatum*, H. Woodw. 1868, Geol. Mag. vol. v. p. 3, pl. i. fig. 2.

**RHACHIOSOMA**, H. Woodw. 1870.

*Rhachiosoma*, H. Woodw. 1870, Quart. Journ. Geol. Soc. vol. xxvii. p. 91.

*Distribution*. Lower Eocene.

**Rhachiosoma bispinosa**, H. Woodw. 1870. Lower Eocene, Portsmouth.

*Rhachiosoma bispinosa*, H. Woodw. 1870, Quart. Journ. Geol. Soc. 1871, vol. xxvii. pl. iv. fig. 3, p. 91; *ibid.* 1873, vol. xxix. pl. i. figs. 1-6, p. 26.

**Rhachiosoma echinata**, H. Woodw. 1870. Lower Eocene, Portsmouth.

*Rhachiosoma echinata*, H. Woodw. 1870, Quart. Journ. Geol. Soc. 1871, vol. xxvii. pl. iv. fig. 5, p. 92.

**TRACHYNOTUS**, Bell, 1862.

*Trachynotus*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 2.

*Distribution*. Upper Greensand.

**Trachynotus sulcatus**, Bell. Upper Greensand, Wiltshire.

*Trachynotus sulcatus*, Bell, Mon. Pal. Soc. pt. 2, Crustacea, 1862, p. 2, pl. i. fig. 1.

**XANTHILITES**, Bell, 1857.

*Xanthilites*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 17.

*Distribution*. London Clay.

**Xanthilites Bowerbankii**, Bell. London Clay, Isle of Sheppey.

*Xanthilites Bowerbankii*, Bell, Crustacea of London Clay, Mon. Pal. Soc. 1857, p. 17, pl. ii. figs. 2-6.

**XANTHOPSIS**, McCoy, 1849.

*Xanthopsis*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 163; Desmarest, Crust. Foss. p. 95; Bell, 1859, Mon. Pal. Soc. p. 14.

*Distribution*. Eocene.

**Xanthopsis Leachii**, sp., Desmarest. London Clay, Sheppey; Alum Bay, Isle of Wight.

*Cancer Leachii*, Desmarest, Crust. Foss. p. 95, t. viii. figs. 5, 6.

*Xanthopsis nodosa*, McCoy, 1849, Ann. Nat. Hist. 2nd ser. vol. iv. p. 163; Bell, Foss. Crust. Mon. Pal. Soc. 1857, pt. 1, p. 14, pl. i. figs. 1-4.

**Xanthopsis unispinosa**, McCoy. London Clay, Sheppey, Highgate, &c.

*Xanthopsis unispinosa*, McCoy, 1849, Ann. Nat. Hist. 2nd ser. vol. iv. p. 164; Bell, Mon. Pal. Soc. 1857, Crustacea, pt. 1, pl. ii. fig. 1, p. 16.

**Xanthopsis hispinosa**, M'Coy.London Clay, Isle of Sheppey,  
Highgate, &c.*Xanthopsis hispinosa*, M'Coy, Ann. Nat. Hist. 1849, 2nd ser. vol. iv. p. 164 ;  
Bell, Lond. Clay Crust. Mon. Pal. Soc. 1857, p. 15, pl. i. figs. 5, 6.**XANTHOSIA**, Bell, 1862.*Xanthosia*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 3.*Distribution*. Upper Greensand.**Xanthosia gibbosa**, Bell, 1862.

Upper Greensand, Wiltshire.

*Xanthosia gibbosa*, Bell, Mon. Pal. Soc. Crustacea, pt. 2, 1862, p. 3, pl. i. figs. 4-6.**Xanthosia granulosa**, M'Coy, sp. 1854. Upper Greensand, Cambridge.*Reussia granulosa*, M'Coy, Ann. & Mag. Nat. Hist. 1854, 2nd ser. vol. xiv.  
p. 122 ; Bell, Mon. Pal. Soc. Crust. pt. 2, 1862, p. 4, pl. i. f. 13.

## Suborder 2. ANOMURA.

**DROMILITES**, Milne-Edwards, 1838.*Inachus*, Desmarest, 1822, Crust. Foss. p. 116.*Dromilites*, Milne-Edw. 1838, Lam. Hist. Nat. Animaux sans vertèbres, 2nd  
edit. 1844 ; Bell, 1857, Mon. Pal. Soc. p. 31.*Basinotopus*, M'Coy, 1849, Ann. Nat. Hist. 2nd ser. vol. iv. p. 168.*Distribution*. Eocene.**Dromilites Bucklandi**, Milne-Edwards.London Clay, Copenhagen  
Fields, London.*Dromilites Bucklandi*, Milne-Edwards, Hist. Nat. des Crust. t. ii. p. 178 ;  
Bell, Crust. Lond. Clay, Mon. Pal. Soc. 1857, p. 31, pl. vi. figs. 1-11.**Dromilites Lamareckii**, Desmar. sp.London Clay, Sheppey,  
Highgate, &c.*Inachus Lamareckii*, Desmarest, 1822, Crust. Foss. t. ix. figs. 15, 16, p. 116.*Basinotopus Lamareckii*, M'Coy, Ann. Nat. Hist. 1849, 2nd ser. vol. iv. p. 168.**HOMOLOPSIS**, Carter, MS., Bell, 1862.*Homolopsis*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 22.*Distribution*. Gault and Greensand.**Homolopsis Edwardsi**, Bell.Upper Greensand, Cambridge ;  
Gault, Folkestone.*Homolopsis Edwardsii*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 23, pl. v.  
fig. 12.

## Suborder 3. MACRURA.

**ÆGER**, Münster, 1839.*Locusta*, Knorr, 1755.*Squilla*, Bajer, 1757.*Macrourites* (pars), Schloth. 1822, Petrefak. Nachtr. p. 32.*Palæmon* (pars), Desmar. 1822, Hist. Nat. des Crust. foss. p. 134; Krüger, 1823, Geschichte der Urwelt, p. 592.*Penæus*, Germar, 1827, in Keferst. Deutschl. iv. p. 100.*Palæmon*, Holl, 1829, Handb. der Petref. p. 151; Quenstedt, 1852, Handbk. p. 272.*Æger*, Münster, 1839, Beitr. p. 64; Bronn, 1848, Index Pal. p. 17; Frischm. 1853, Progr. p. 31; Pictet, 1854, Traité de Paléont. ii. p. 457; Oppel, 1862, Pal. Mittheil. p. 109, t. 33-36.*Distribution*. Lias, England; Lithographic stone, Solenhofen.**Æger Marderi**, H. Woodw. 1866.

Lias, Lyme Regis.

*Æger Marderi*, H. Woodw. 1866, Geol. Mag. vol. iii. p. 10, pl. 1.**ANTHRAPALÆMON**, Salter, 1861.*Apus*, Milne-Edwards, Prestwich in Trans. Geol. Soc. 1836, 2nd ser. vol. v. p. 413.*Anthrapalæmon*, Salter, Quart. Journ. Geol. Soc. 1861, vol. xvii. p. 528; H. Woodw. 1866, Trans. Geol. Soc. Glasgow, vol. ii. p. 244.*Palæocarabus*, Salter, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 519.*Distribution*. Coal-measures: England, Scotland, N. America, &c.**Anthrapalæmon Grossarti**, 1861.

Coal-measures, Glasgow.

*Apus dubius*, Milne-Edw. 1836, Trans. Geol. Soc. 2nd ser. vol. v. p. 413.*Anthrapalæmon Grossarti*, Salter, 1861, Quart. Journ. Geol. Soc. vol. xvii. p. 528, with woodcuts; 1866, Trans. Geol. Soc. Glasgow, vol. ii. p. 244, pl. iii. figs. 5, 6, 7.*Palæocarabus Russellianus*, Salter, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 520, figs. 1, 2.**ARCHÆOCARABUS**, M'Coy, 1849.*Archæocarabus*, M'Coy, 1849, Ann. Mag. Nat. Hist. 2nd ser. vol. iv. p. 174; Bell, 1857, Mon. Pal. Soc. pt. 1, p. 42.*Distribution*. London Clay.**Archæocarabus Bowerbankii**, M'Coy.

London Clay, Sheppey.

*Archæocarabus Bowerbankii*, M'Coy, Ann. Nat. Hist. 1849, 2nd ser. vol. iv. p. 174; Bell, Crust. Lond. Clay, Mon. Pal. Soc. 1857, pt. 1, p. 42, pl. xi. figs. 1-5.**ASTACODES**, Bell, 1862.*Meyeria*, Phillips, MS.*Astacodes*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 30.*Distribution*. Speeton Clay.

**Astacodes falcifer**, sp., Phillips, MS. Lower Cretaceous, Speeton Clay.

*Meyeria falcifer*, Phillips, MS.

*Astacodes falcifer*, Bell, 1862, Mon. Pal. Soc. p. 30, pl. ix. figs. 1-6.

### ?ASTACUS, Gronov. 1764.

*Astacus*, Gronov. 1764, Zoophyl.; Bell, 1862, Mon. Pal. Soc. p. 31.

*Distribution*. Speeton Clay.

**Astacus ? multicavatus**, Bean, MS. Speeton Clay, Speeton, Yorkshire.

*Astacus ? multicavatus*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 31, pl. ix. figs. 7, 8.

### CALLIANASSA, Leach, 1813.

*Callianassa*, Leach, 1813, Edinb. Encycl. vii. p. 40; Otto, 1845, in Geinitz's Grundriss der Verstein. p. 211; Fritsch, 1867, Ueber die Callianassen der böhmischen Kreideformation; H. Woodw. 1868, Brit. Assoc. Report, p. 74.

*Pagurus*, Faujas Saint-Fond, 1799, Hist. Nat. de la Montagne de St.-Pierre de Maestricht, p. 179; Desmarest, 1822, Hist. Nat. des Crust. p. 127; König, 1823, Icones, Foss. Sect. Centuria, i. p. 2.

*Distribution*. Lower Cretaceous and Tertiary to recent (marine).

**Callianassa Batei**, H. Woodw. 1868. Upper marine series, Hempstead, Isle of Wight.

*Callianassa Batei*, H. Woodw. Brit. Assoc. Report, 1868, p. 74, pl. ii. fig. 4.

**Callianassa isochela**, H. Woodw. 1875. Kimmeridge Clay, Sub-Wealden Boring, Sussex.

*Callianassa isochela*, H. Woodw. Quart. Journ. Geol. Soc. 1875, vol. xx. p. 47, pl. xxxii. figs. 1, 2.

**Callianassa neocomiensis**, H. Woodw. 1868. Greensand, Colin Glen, Belfast.

*Callianassa neocomiensis*, H. Woodw. Brit. Assoc. Report, 1868, p. 75, pl. ii. fig. 5.

### ENOPOCLYTIA, M'Coy, 1849.

*Enoploclytia*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 332; H. Woodw. 1873, Brit. Assoc. Report, p. 307.

*Astacus*, Mantell, 1822, Geol. Sussex, p. 221.

*Palaestacus*, Dixon, 1850, Geol. Sussex.

*Klytia*, Renss, 1854, Vienna Trans. Bd. vi.

*Distribution*. Lower Chalk.

**Enoploclytia brevimana**, M'Coy. Lower Chalk, Cherry Hinton.

*Enoploclytia brevimana*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 332.

**Enoploclytia Imagei**, M'Coy. Lower Chalk, Burwell, Maidstone.

*Enoploclytia Imagei*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 332.

**Enoploclytia Leachii**, Mant. sp. Lower Chalk, Kent, Sussex, Surrey,  
Saxony, Bohemia.

*Enoploclytia Leachii*, McCoy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv.  
p. 331; Mantell, 1822, Geol. Sussex, p. 221, t. 29; 1850, Dixon's Geol.  
Sussex, t. 38\*, figs. 6, 7.

*Klytia*, Reuss, Vienna Trans. 1854, Bd. vi. t. 5.

**Enoploclytia scabrosa**, H. Woodward, 1873. Hard Chalk, Dover.

*Enoploclytia scabrosa*, H. Woodw. 1873, Brit. Assoc. Report, p. 307.

**Enoploclytia sussexiensis**, Mant. sp. 1822. Lower Chalk, Charing,  
Kent; Lewes, Sussex.

*Enoploclytia sussexiensis*, Mant. Geol. Sussex, 1822, t. 30. fig. 3; Medals, p. 537.

### ERYMA, Meyer, 1840.

*Eryma*, Jahrb. 1840, p. 587; Krebse, p. 18; Phillips, Geol. Yorks. vol. i.;  
Oppel, 1862, Paläont. Mitth.; H. Woodw. & Salter, 1865, Cat. & Chart  
Foss. Crust. p. 6.

*Distribution.* Oolite and Lias.

**Eryma elegans**, Oppel, 1862. Dogger, Moselle; Upper and Middle Lias,  
Ilminster.

*Eryma elegans*, Oppel, Paläont. Mitth. 1862, tab. iv. fig. 7; H. Woodw. in  
Somerset. Nat. Hist. Soc. 1865-6, vol. xiii. p. 26.

**Eryma rostrata**, Phillips, sp., 1835. Oolite, Yorkshire.

*Astacus rostratus*, Phillips, Geol. Yorkshire, 1835, vol. i. t. iv. fig. 20.

*Eryma rostrata*, H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 6, fig. 16.

### ERYON, Desmarest, 1822.

*Eryon*, Desm. 1822, Crust. Fossil.; 1825, Proc. Geol. Soc.; McCoy, 1849,  
Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 172; H. Woodw. 1866,  
Quart. Journ. Geol. Soc. vol. xxii. p. 495.

*Coleia*, Broderip, 1840, Trans. Geol. Soc. 2nd ser. vol. v. p. 172.

*Distribution.* Lias.

**Eryon (Coleia) antiquus**?, Brod. sp. Upper Lias, Ilminster, and  
L. Lias, Lyme Regis.

*Coleia antiqua*, Broderip, 1840, Trans. Geol. Soc. 2nd series, vol. v. p. 172.

*Eryon antiquus*, H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 5;  
H. Woodw. in Quart. Journ. Geol. Soc. vol. xxii. p. 499, 1866; in Proc.  
Somersetshire Archæol. & Nat. Hist. Soc. vol. xiii. 1865-6, p. 71.

**Eryon barrovensis**, McCoy, 1849. Lias, Barrow-on-Soar.

*Eryon barrovensis*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 172;  
H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 5; H. Woodw.  
1866, Quart. Journ. Geol. Soc. vol. xxii. p. 495, pl. xxv. fig. 1.

**Eryon Brodiei**, H. Woodw. 1866. Lower Lias, Lyme Regis.

*Eryon Brodiei*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 498,  
pl. xxiv. fig. 2.

**Eryon crassichelis**, H. Woodw. 1866. Lower Lias, Lyme Regis.

*Eryon crassichelis*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 497,  
pl. xxv. fig. 2.

**Eryon Moorei**, H. Woodw. 1866. Upper White Lias, Ilminster.

*Eryon Moorei*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 499, pl. xxv. fig. 3; H. Woodw. Proc. Somerset. Archaeol. & Nat. Hist. Soc. 1865-6, vol. xiii. p. 71.

**Eryon wilmcotensis**, H. Woodw. 1866. Lower Lias, Wilmcote.

*Eryon wilmcotensis*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 498, pl. xxiv. fig. 3.

### GLYPHÆA, Meyer, 1835.

*Glyphæa*, Meyer, 1835, Jahrb.; Bell, 1862, Mon. Pal. Soc. p. 37; Oppel, 1862, Paläont. Mitth.; H. Woodw. 1868, Geol. Mag. vol. v. p. 154.

*Astacus*, Phillips, 1835, Geol. Yorks. pt. I.

*Distribution.* Lias, Oolite, Greensand.

**Glyphæa cretacea**, M'Coy. Greensand, Cambridge.

*Glyphæa cretacea*, M'Coy, Ann. & Mag. Nat. Hist. 1854, 2nd ser. vol. xiv. p. 118, pl. iv. fig. 2; Contrib. to Brit. Palæont. p. 268, fig. 2; Bell, Mon. Pal. Soc. 1862, Crust. pt. 2, p. 37, pl. xi. figs. 11-13; H. Woodw. & Salter, 1867, Cat. & Chart Foss. Crust. p. 6, fig. 29.

**Glyphæa Heeri**, Oppel, 1862. Lower Lias, Lyme Regis, Dorset.

*Glyphæa Heeri*, Oppel, 1862, Paläont. Mitth. tab. 15. figs. 1, 2 *a-c*; H. Woodw. in Geol. Mag. vol. v. 1868, p. 355, pl. xvii. fig. 3.

**Glyphæa liasina**, von Meyer, 1840. Lias, Lyme Regis.

*Glyphæa liasina*, von Meyer, 1840, Foss. Krebse, t. iv. fig. 26; H. Woodw. & Salter, 1865, Cat. & Chart Fossil Crust. p. 5, fig. 10.

**Glyphæa rostrata**, Phillips, sp. 1835. L. Lias, Weston, near Bath; Great Oolite, Scarborough; Coralline, Malton; Inf. Oolite, Blue Wick.

*Astacus rostratus*, Phill. 1835, Geol. Yorks. pt. I, tab. iv. fig. 20.

*Glyphæa rostrata*, H. Woodw. in Geol. Mag. vol. v. 1868, p. 154, pl. xvii. fig. 2.

**Glyphæa scabrosa**, Phillips, sp., 1835. Coralline, Malton.

*Astacus scabrosus*, Phillips, Geol. Yorkshire, vol. i. p. 170.

*Glyphæa scabrosa*, H. Woodw. & Salter, 1865, Cat. & Chart Fossil Crust. p. 6, fig. 11.

**Glyphæa Tomesii**, H. Woodw. 1868. Lower Lias, Welford Hill, Stratford-on-Avon, Warwickshire.

*Glyphæa Tomesii*, H. Woodw. Geol. Mag. vol. v. 1868, p. 355, pl. xvii. fig. 4.

### HEFRIGA, Oppel, 1862.

*Hefriga*, Oppel, 1862, Paläont. Mitth.; H. Woodw. 1865, Somerset. Nat. Hist. Soc. vol. xiii.

*Distribution.* Lias and Oolite.

**Hefriga Frischmanni**?, Oppel, 1862. Lithographic stone, Solenhofen Middle and Upper Lias, Ilminster.

*Hefriga Frischmanni*, Oppel, 1862, Paläont. Mitth. tab. 38. fig. 3*a, b*; H. Woodw. 1865-6, in Somerset. Nat. Hist. Soc. vol. xiii. p. 73.

**HOPLOPARIA, M'Coy, 1849.**

*Hoplopatria*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 178;  
Bell, 1857, Mon. Pal. Soc. pt. 1, p. 39.

*Distribution.* Gault to Eocene.

**Hoplopatria Belli, M'Coy.** London Clay, North London and Isle of Sheppey.

*Hoplopatria Belli*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 178;  
Bell, Crust. Lond. Clay, in Mon. Pal. Soc. 1857, pt. 1, p. 39, pl. x. figs. 1-9.

**Hoplopatria gammaroides, M'Coy.** London Clay, Sheppey, Copenhagen Fields.

*Hoplopatria gammaroides*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 177; Bell, Crust. Lond. Clay, in Mon. Pal. Soc. 1857, pt. 1, p. 38, pl. viii. figs. 4-6, pl. ix.

**Hoplopatria granulosa, Bell.** Upper Greensand, Wiltshire.

*Hoplopatria granulosa*, Bell, Mon. Pal. Soc. 1862, Crust. pt. 2, p. 27, pl. vii. figs. 1, 2.

**Hoplopatria longimana, Sowb. sp.** Greensand, Lyme Regis, Atherfield, Isle of Wight.

*Astacus longimanus*, Sby. Zool. Journ. ii. p. 493, t. xvii.

*Hoplopatria longimana*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 176; Mon. Pal. Soc. 1862, Crust. pt. 2, p. 26, pl. vi.

**Hoplopatria punctulata, Bell.** Gault, Folkestone.

*Hoplopatria punctulata*, Bell, Mon. Pal. Soc. 1862, Crust. pt. 2, p. 27, pl. v. figs. 11-13.

**Hoplopatria Saxbyi, M'Coy, 1854.** Upper Greensand, Bonechurch, Isle of Wight; Devizes, Wiltshire.

*Hoplopatria Saxbyi*, M'Coy, Ann. & Mag. Nat. Hist. 1854, 2nd ser. vol. iv. p. 116; Contr. Brit. Pal. p. 266, fig. 1; Mon. Pal. Soc. 1862, Crust. pt. 2, p. 29, pl. viii.

**Hoplopatria scabra, Bell.** Upper Greensand, Wiltshire, Cambridge; Gault, Folkestone.

*Hoplopatria scabra*, Bell, Mon. Pal. Soc. 1862, Crust. pt. 2, p. 28, pl. vii. figs. 3-7.

**Hoplopatria sulcirostris, Bell.** Gault, Folkestone.

*Hoplopatria sulcirostris*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 25, pl. v. figs. 8-10.

**MECOCHIRUS, Germar, 1826.**

*Mecochirus*, Germar, 1826, Keferst. Geogn. Deutsch. iv.; M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 172; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 6; H. Woodw. 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 48.

*Ammonicolar*, Pearce, 1842, Ann. & Mag. Nat. Hist.

*Distribution.* Oxford and Kimmeridge Clay and Lithographic Limestone.



**Mecochirus Pearcei**, M'Coy, 1849.

Oxford Clay, Wilts.

*Mecochirus Pearcei*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 172; H. Woodw. & Salter, 1865, Cat. & Chart Fossil Crust. p. 6, fig. 14; 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 49.

*Ammonicolar*, Pearce, 1842, Ann. Nat. Hist.

**Mecochirus Peytoni**, H. Woodw. 1876. Kimmeridge Clay, Sub-Wealden Boring, near Battle, Sussex.

*Mecochirus Peytoni*, H. Woodw. 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 48, pl. vi. fig. 3.

**MESOCRANGON**, H. Woodw. 1873.

*Mesocrangon*, H. Woodw. 1873, Brit. Assoc. Report, p. 306.

*Distribution*. Gault.

**Mesocrangon atra**, H. Woodw.

Gault, Folkestone.

*Mesocrangon atra*, H. Woodw. 1873, Brit. Assoc. Report, p. 306; H. Woodw. Geol. Mag. vol. x. p. 523.

**MEYERIA**, M'Coy, 1849.

*Meyeria*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 333; Bell, 1862, Mon. Pal. Soc., Crust. pt. 2, p. 33.

*Astacus*, Phillips, 1835, Geol. Yorkshire, t. iii.

*Distribution*. Gault and Greensand.

**Meyeria ornata**, Phillips, sp.

Speeton Clay, Speeton, Yorkshire.

*Astacus ornatus*, Phil. Geol. Yorks. t. iii. fig. 2.

*Meyeria ornata*, M'Coy, Ann. & Mag. Nat. Hist. 1849, 2nd ser. vol. iv. p. 333; M'Coy, Contrib. to Brit. Pal. p. 133; Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 33, pl. ix. figs. 9-11.

**Meyeria vectensis**, Bell?

Greensand, Atherfield, Isle of Wight.

*Meyeria magna*, M'Coy, Ann. Nat. Hist. 1849, 2nd ser. vol. iv. p. 334; Contrib. Brit. Pal. p. 139; Mon. Pal. Soc. 1862, Crust. pt. 2, p. 33, pl. x.

**MITHRACIA**, Bell, 1857.

*Mithracia*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 2.

*Distribution*. London Clay.

**Mithracia libinioides**, Bell.

London Clay, Sheppey.

*Mithracia libinioides*, Bell, Fossil Crustacea, in Mon. Pal. Soc. 1857, pt. 1, p. 9, pl. v. figs. 10-12.

**Mithracia**, sp. nov.\*

London Clay.

**MITHRACITES**, Gould, 1859.

*Mithracites*, Gould, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 237; Bell, 1862, Mon. Pal. Soc. pt. 2, p. 1.

*Distribution*. Lower Greensand.

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\* Two specimens in Mus. Brit. referred to by Prof. Bell in Mon. Pal. Soc. 1857 p. 10 (ex F. E. Edwards Collection).

**Mithracites vectensis**, Gould.

Lower Greensand, Isle of Wight.

*Mithracites vectensis*, Gould, Quart. Journ. Geol. Soc. 1859, vol. xv. p. 237, figs. 1, 2, 3; Bell, Mon. Pal. Soc. Crustacea, pt. 2, 1862, p. 1, pl. i. figs. 2, 3.

**PALÆOCRANGON**, Salter, 1861.

*Uronectes*, Salter, Trans. R. S. Edinb. xxii. p. 394.

*Palæocrangon*, Salter, 1861, Quart. Journ. Geol. Soc. vol. xvii. p. 533.

*Distribution*. Carboniferous.

**Palæocrangon socialis**, Salter.

Coal-measures, Fifeshire.

*Uronectes socialis*, Salter, Trans. R. S. Edinb. xxii. p. 394; Salter, 1861, Quart. Journ. Geol. Soc. vol. xvii. p. 533, figs. 8 *a*, *b*, *c*; H. Woodw. & Salter, 1865, Cat. & Chart Fossil Crust. p. 5, fig. 1.

**Palæocrangon**, sp.?, Salter, 1861.

Millstone-grit, Yorkshire.

*Palæocrangon*, sp.?, Salter, 1861, Quart. Journ. Geol. Soc. vol. xvii. p. 533.

**PALINURINA**, Münster, 1839.

*Palinurina*, Münster, 1839, Beitr. Petref. ii. p. 37; Oppel, 1862, Paläont. Mitth. p. 86; H. Woodw. 1868, Geol. Mag. vol. v. p. 260.

*Distribution*. Lias and Lithographic stone.

**Palinurina longipes**, Münster, 1839.

Upper and Middle Lias, Ilminster;

Lithographic stone, Solenhofen.

*Palinurina longipes*, Münster, 1839, Beitr. Petref. ii. p. 37, tab. xiv. fig. 8; Oppel, Paläont. Mitth. 1862, tab. xxiv. fig. 1, p. 86; H. Woodw. in Somerset. Nat. Hist. Soc. 1865-6, vol. xiii. p. 72; H. Woodw. 1868, Geol. Mag. vol. v. p. 260, pl. xiv. fig. 5.

**PENÆUS**, Fabr. 1798.

*Penæus*, Fabr. 1798, Suppl. Ent. Syst.; Quenst. Handb. p. 273; Oppel, 1862, Paläont. Mitth. p. 89.

*Antrimpos*, Münster, 1839, Beitr. ii. p. 49.

*Kölga* (pars), Münster, 1839, Beitr. ii. p. 60.

*Distribution*. Lias and Lithographic stone, Solenhofen.

**Penæus latipes**, Oppel, 1862.

Upper and Middle Lias, Ilminster;

Lithographic stone, Solenhofen.

*Penæus latipes*, Oppel, Paläont. Mitth. 1862, tab. xxvi. fig. 5, p. 95; H. Woodw. in Somerset. Nat. Hist. Soc. 1865-6, vol. xiii. p. 72.

**Penæus Sharpii**, H. Woodw. 1868.

Lower Lias, Northampton.

*Penæus Sharpii*, H. Woodw. Brit. Assoc. Report, 1868, p. 74, pl. ii. fig. 3.

**PHLYCTISOMA**, Bell, 1862.

*Phlyctisoma*, Bell, 1862, Mon. Pal. Soc. pt. 2, p. 34.

*Distribution*. Greensand.

**Phlyctisoma tuberculatum**, Bell. Upper Greensand, Cambridge.

*Phlyctisoma tuberculatum*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, p. 35, pl. xi. figs. 1-8.

**Phlyctisoma granulatum**, Bell. Upper Greensand, Cambridge.

*Phlyctisoma granulatum*, Bell, Mon. Pal. Soc. 1862, Crust. pt. 2, p. 36, pl. xi. figs. 9, 10.

### **PSEUDOGLYPHÆA**, Oppel, 1860.

*Glyphæa*, Meyer, 1737, Bronn's Jahrb. p. 315.

*Astacus*, Quenst. 1852, Handb. p. 269.

*Pseudoglyphæa*, Opp. 1860, Württemb. naturw. Jahresb. xvii. Jahrg. p. 111 ;

H. Woodw. 1868, Geol. Mag. vol. v. p. 353.

*Distribution*. Lower Lias.

**Pseudoglyphæa grandis**, Meyer, sp. Lower Lias, Weston, near Bath.

*Glyphæa grandis*, Meyer, 1837, Bronn's Jahrb. p. 315.

*Pseudoglyphæa grandis*, H. Woodw. in Geol. Mag. vol. v. 1868, p. 353, pl. xvii. fig. 1.

### **SCAPHEUS**, H. Woodw. 1863.

*Scapheus*, H. Woodw. 1863, Quart. Journ. Geol. Soc. vol. xix. p. 318.

*Distribution*. Lias.

**Scapheus ancylochelis**, H. Woodw. 1863. L. Lias, Lyme Regis.

*Scapheus ancylochelis*, H. Woodw. 1863, Quart. Journ. Geol. Soc. vol. xix. p. 318, pl. xi.

### **SCYLLARIDIA**, Bell, 1857.

*Scyllaridia*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 35 ; H. Woodw. 1870, Geol. Mag. vol. vii. p. 493.

*Distribution*. London Clay.

**Scyllaridia punctata**, H. Woodw. 1873. Gault, Folkestone.

*Scyllaridia punctata*, H. Woodw. 1873, Brit. Assoc. Report, p. 306.

**Scyllaridia Bellii**, H. Woodw. 1870. London Clay, Sheppey.

*Scyllaridia Bellii*, H. Woodw. Geol. Mag. 1870, vol. vii. pl. xxii. figs. 1, 1 a, 1 b, 2, p. 493.

**Scyllaridia Gardneri**, H. Woodw. 1873. Gault, Folkestone.

*Scyllaridia Gardneri*, H. Woodw. 1873, Brit. Assoc. Report, p. 306.

**Scyllaridia Koenigii**, Bell, 1857. London Clay, Sheppey.

*Cancer (Scyllarus?) tuberculatus*, König, 1820, Icon. Foss. Sect. fig. 54.

*Xanthopsis tuberculatus*, Morris, Cat. Brit. Foss. 1854, p. 116 ; Bell, Crust. Lond. Clay, Mon. Pal. Soc. 1857, pt. 1, p. 35, pl. viii. figs. 1-3.

**THENOPS**, Bell, 1857.

*Thenops*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 33.

*Distribution*. London Clay.

**Thenops scyllariformis**, Bell. London Clay, Sheppey and Highgate.

*Thenops scyllariformis*, Bell, Mon. Pal. Soc. 1857, pt. 1, Crustacea, p. 33, pl. vii. figs. 1-8.

**TRACHYSOMA**, Bell, 1857.

*Trachysoma*, Bell, 1857, Mon. Pal. Soc. pt. 1, p. 41.

*Distribution*. London Clay.

**Trachysoma scabrum**, Bell. London Clay, Primrose Hill.

*Trachysoma scabrum*, Bell, Crustacea of Lond. Clay, pt. 1, Mon. Pal. Soc. 1857, p. 41, pl. x. fig. 11.

**TROPIFER**, Gould, 1857.

*Tropifer*, Gould, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 360.

*Distribution*. Lias bone-bed.

**Tropifer lævis**, Gould, 1857. Lias bone-bed, Aust Passage.

*Tropifer lævis*, Gould, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 360, figs. 1, 2, 3.

## Order II. STOMAPODA.

**PYGOCEPHALUS**, Huxley, 1857.

*Pygocephalus*, Huxley, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 363;  
H. Woodw. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 240.

*Distribution*. Coal Measures.

**Pygocephalus Cooperi**, Huxley, 1857. Coal-shale, Medlock Park  
Bridge, Ashton-under-Lyne.

*Pygocephalus*, Huxley, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 363, pl. xiii.; H. Woodw. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 240, pl. iii. fig. 1, 2.

**Pygocephalus Huxleyi**, H. Woodw. 1867. Lower Coal-measures in  
Ironstone nodule, Paisley.

*Pygocephalus Cooperi*, Huxley, 1862, Quart. Journ. Geol. Soc. vol. xviii. p. 420 (woodcut, p. 421).

*Pygocephalus Huxleyi*, H. Woodw. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 243, pl. iii. fig. 3, woodcuts, figs. 1, 2.

## Order III. ISPODA.

**ARCHÆONISCUS**, Milne-Edw. 1846.

*Archæoniscus*, Milne-Edw. 1846, Ann. des Sc. Nat. vol. xx. p. 326; Brodie, 1845, Foss. Insects, p. 13; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 8.

*Distribution*. Purbeck.

**Archæoniscus Brodiei**, Westwood, 1845.

Purbeck, Wiltshire.

*Archæoniscus Brodiei*, Westwood in Brodie's Insects of the Sec. Rocks, p. 10, pl. i. figs. 6-10; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 8, fig. 17.

**BOPYRUS**, Bell, 1862.

*Bopyrus*, Bell, 1862, Mon. Pal. Soc. 1862, pt. 2; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 9.

*Distribution*. Greensand.

**Bopyrus** (parasitic under carapace of *Palæocorystes Stokesii*), Bell, 1862.

Greensand, Cambridge.

*Bopyrus*, Bell, Mon. Pal. Soc. 1862, Crustacea, pt. 2, pl. 3. fig. 3; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 9, fig. 18.

**PALÆGA**, H. Woodw. 1870.

*Palæga*, H. Woodw. 1870, Geol. Mag. vol. vii. p. 495.

*Distribution*. Cretaceous.

**Palæga Carteri**, H. Woodw. 1870. Grey Chalk, Dover; Chloritic Chalk, Cambridge; Chalk Rocks, Luton, Beds.

*Palæga Carteri*, H. Woodw. Geol. Mag. 1870, vol. vii. pl. xxii. figs. 3-6, p. 495; *ibid.* p. 588.

## Order IV. TRILOBITA.

**ACIDASPIS**, Murchison, 1839.

*Acidaspis*, Murchison, 1839, Silur. Syst. p. 658, pl. 14. figs. 10 & 15; McCoy, Synop. Silur. Foss. in Ireland, 1846, p. 45, pl. iv. fig. 7; J. Hall, Paleont. New York, 1848, i. p. 240, pl. 34. fig. 5; Phillips & Salter, Mem. Geol. Surv. 1848, vol. ii. pt. 1, p. 348, pl. ix. fig. 6; McCoy, Ann. & Mag. Nat. Hist. 1850, ser. 2, vol. iv. p. 401; Barrande, 1852, Syst. Silur. de la Bohême, p. 692, pls. 36, 37, 38; Salter, 1853, Decades Geol. Surv. vii. pl. vi.; Salter, 1873, Cat. Woodw. Mus. pp. 50, 93, 134, 166.

*Odontopleura*, Emmrich, 1839, De Trilobit. Dissert. p. 53; Burmeister, Organ. d. Trilob. 1843, p. 71, pl. i. fig. 4, et pl. ii. fig. 11; Emmrich, 1845, N. Jahrb. f. Miner. Heft i. pp. 44 & 51; Barrande, 1846, Notice Prélim. et Nouv. Trilob.; Geinitz, Grundr. d. Verstein. 1846, p. 238; Beyrich, Unter. üb. Trilobiten, ii. St. p. 16, pl. iii., 1846.

*Arges*, Goldfuss, N. Jahrb. f. Miner. 1843, Heft v. pp. 544 & 556, pl. 4. figs. 1, 2.

*Ceraurus*, Lovén, 1845, Öfvers. af Kongl. Vetensk. Akad. Förh., April 1845.

*Distribution.* Llandeilo and Bala beds, Wenlock and Ludlow groups.

**Acidaspis Barrandii**, Fletcher & Salter, 1859. Silurian, Dudley.

*Acidaspis bispinosus*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. 9. fig. 4 only.

*A. Barrandii*, Fletcher & Salter, 1859, in Siluria, 3rd edit. p. 261, Foss. 64, fig. 9; Salter, 1873, Cat. Camb. & Sil. Foss. p. 134.

**Acidaspis bispinosus**, M'Coy, 1844. Wenlock L., Dudley and Abberley; Llandeilo Flags, Chair of Kildare.

*Acidaspis bispinosus*, M'Coy, 1844, Synopsis Sil. Foss. Ireland, pl. iv. fig. 7; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 349, pl. 9. figs. 4 & 5; Salter, 1853, Geol. Surv. Decade vii. pl. vii. fig. 4.

**Acidaspis Brightii**, Murch. 1839. Wenlock Limestone, Dudley and Vinnal Hill.

*Paradoxides quadrimucronatus*, Murch. 1839, Sil. Syst. t. 14. fig. 10.

*Odontopleura elliptica*, Emmr. 1845, Neues Jahrb. pt. 1.

*Acidaspis Brightii*, Murch. 1839, Sil. Syst. t. 14. fig. 15; Salter, 1848, Mem. Geol. Surv. pt. 1, vol. ii. p. 348, pl. ix. figs. 6-9.

**Acidaspis callipareos**, Thomson, 1857. Mulloch-Hill Sandstone, Girvan, Ayrshire.

*Acidaspis callipareos*, Thoms. 1847, Quart. Journ. Geol. Soc. vol. xiii. p. 208, pl. vi. figs. 11 & 12.

**Acidaspis Caractaci**, Salter, 1853. Caradoc, Gretton, Shropshire.

*Acidaspis Caractaci*, Geol. Surv. Decade vii. 1853, p. 7 of text attached to pl. 6; Quart. Journ. Geol. Soc. 1857, vol. xiii. p. 211, pl. vi. figs. 15-17.

**Acidaspis coronata**, Salter, 1857. Lower Ludlow Rock, Vinnal Hill, Ludlow.

*Acidaspis Brightii*, Salter, Mem. Geol. Surv. vol. ii. pt. 1, p. 348, pl. 9. figs. 8, 9.

*A. coronata*, Salter, Quart. Journ. Geol. Soc. vol. xiii. p. 210.

**Acidaspis dama**, Salter & Fletcher. Upper Silurian, Dudley.

*Acidaspis dama*, Salter & Fletcher, 1854, in Morris Cat. p. 99; 1859, Siluria, 3rd edit. Appen. p. 539; 1876, Cat. Camb. & Sil. Foss. p. 134.

**Acidaspis dumetosus**, Salter & Fletcher. Upper Silurian, Dudley.

*Acidaspis dumetosus*, Salter & Fletcher, 1854, in Morris Cat. p. 99; 1859, Siluria, 3rd edit. Appen. p. 539; 1876, Cat. Camb. & Sil. Foss. p. 134.

- Acidaspis Hughesii**, Salter, 1873. Lower Wenlock, Casterton Low Fell, Kirkby Lonsdale.  
*Acidaspis Hughesii*, Salter, 1873, in Sedgwick's Cat. Camb. Sil. Foss. p. 93.
- Acidaspis hystrix**, Thomson, 1857. U. Bala, Pinwhapple Glen, Ayrshire.  
*Acidaspis hystrix*, Thompson, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 207, pl. vi. figs. 6-10.
- Acidaspis Jamesii**, Salter, 1852. Llandeilo Flags, Waterford and Wexford, Ireland.  
*Acidaspis bispinosus* (McCoy), Salter, 1848, Memoirs Geol. Surv. vol. ii. pt. 1, fig. 5.  
*A. Jamesii*, Salter, 1852, Proceed. Brit. Assoc. p. 57; 1835, Decade vii. Geol. Surv. pl. vi. fig. 1, 2, 3.
- Acidaspis lalage**, Thomson, 1857. U. Bala, Pinwhapple Glen, Ayrshire.  
*Acidaspis lalage*, Thoms. 1857, Quart. J. Geol. Soc. vol. xiii. p. 206, pl. vi. figs. 1-5.
- Acidaspis unica**, Thomson, 1857. U. Bala, Pinwhapple Glen, Ayrshire.  
*Acidaspis unica*, Thoms. 1857, Quart. J. Geol. Soc. vol. xiii. p. 209, pl. vi. figs. 13, 14.
- Acidaspis quinquespinosus**, Salter & Fletcher. Wenlock L., Dudley.  
*Odontopleura Brightii*, Beyrich, Böhm. Tril. pt. 2, t. 3. f. 6.  
*Acidaspis quinquespinosus*, S. & F. 1854, in Morris Cat. p. 99; 1859, Siluria, 3rd edit. Appen. p. 539; 1876, Cat. Camb. & Sil. Foss. p. 134.

### **ÆGLINA**, Barrande, 1852.

- Egle*, Barrande, 1846, Notice prélim. p. 34.  
*Cyclopyge*, Corda, 1847, Prodr. p. 64, pl. 4. fig. 32.  
*Microparia*, Corda, 1847, Prodr. p. 52, pl. 3. fig. 26.  
*Æglina*, Barrande, 1852, Syst. Sil. Cent. Bohém. p. 663, pls. 34 & 43; Salter, 1853, Dec. vii. Mem. Geol. Surv. pl. x.; Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 185.
- Distribution.* Llandeilo Flags, co. Dublin; near Haverfordwest, Pembrokeshire; Coniston Flags, near Coniston. Lower Silurian, Étage D, Bohemia.
- Æglina binodosa**, Salter, 1854. Lower Llandeilo, Shropshire and Prague.  
*Æglina binodosa*, Salter, in Siluria, 2nd edit. 1854, Foss. 8, p. 6; Decades Geol. Surv. no. 11, pl. 4. figs. 1-6; 1866, Mem. Geol. Surv. vol. iii. p. 317, pl. 11b. fig. 3.
- Æglina Boia**, Hicks, 1873. Middle Arenig, Whitesand Bay.  
*Æglina Boia*, Hicks, 1873, Cat. Camb. & Sil. Foss. p. 23; 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 185, pl. x. figs. 9, 9a.
- Æglina? caliginosa**, Salter, 1866. Lower Llandeilo, Ty-Obry, Garth, Portmadoc.  
*Æglina caliginosa*, Salter, Mem. Geol. Surv. vol. iii. p. 318, pl. 11a. fig. 10; Cat. Camb. & Sil. Foss. 1872, p. 23.

*Æglina grandis*, Salter, 1854. Lower Llandeilo, Whitesand Bay,  
Pembrokeshire.

*Æglina grandis*, Salter, Siluria, 2nd edit. 1854, Foss. 9, fig. 6; Geol. Surv.  
Decade vii. pl. 10. fig. 8, & no. xi. pl. 9. figs. 7, 8; 1866, Mem. Geol. Surv.  
vol. iii. p. 317, pl. 12. fig. 11.

*Æglina Hughesii*, Hicks, 1876. (Arenig) Cambrian Shales,  
near Caernarvon.

*Æglina Hughesii*, Hicks, 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 138.

*Æglina major*, Salter, 1853. Llandeilo Flags, Glan-y-gors,  
Anglesea.

*Æglina major*, Salter, 1853, Geol. Surv. Decade vii. pl. x. fig. 9.

*Æglina mirabilis*, Forbes, MS. Llandeilo Flags, Portrane, co. Dublin,  
and Stoneyford, Pembrokeshire.

*Æglina mirabilis*, Salter, 1853, Geol. Surv. Decade vii. pl. x. figs. 1-8.

*Æglina obtusicaudata*, Hicks, 1875. Upper Arenig,  
Llanvirn Quarry.

*Æglina obtusicaudata*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 185,  
pl. x. fig. 3.

### AGNOSTUS, Brongniart, 1822.

*Entomolithus*, Linnæus, 1763; Modeer, 1785.

*Entomostracites*, Wahlenberg, 1821.

*Battus*, Dalman, 1826; Holl, 1829; Hisinger, 1837; Boeck, 1838; Emm-  
rich, 1839; Beyrich, 1845; Barrande, 1840, Note prélim. pp. 14 & 35.

*Trinodus*, McCoy, 1846, Syn. Sil. Foss. Irel. p. 56, pl. iv. fig. 3; 1851,  
Synopsis. Brit. Foss. p. 142.

*Agnostina*, McCoy, 1849, Ann. & Mag. Nat. Hist. ser. 2, iv. p. 402.

*Phalacroma*, *Mesospheniscus*, *Diplorrhina*, *Condylopyge*, *Lejopyge*, *Arthro-  
rhachis*, *Renonopsis*, *Pleuroctenium* (pars), Corda, 1847, Prodrom. pp. 42  
et 114.

*Agnostus*, Brong. 1822, Crust. Foss. p. 38, pl. iv. fig. 4; Schlot. 1823;  
Eichwald, 1825; Goldfuss, 1832; Bronn, 1835; Murch. 1839, Sil. Syst.  
p. 664, pl. 25. fig. 6; Milne-Edw. 1840; Goldfuss, 1843; Burmeister,  
1843; Emmrich, 1845; Geinitz, 1846; Pictet, 1846; Eichwald, 1846;  
J. Hall, 1847, Pal. of New York, vol. i. p. 258, pl. 67; Phillips and  
Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pp. 1, 351, pl. viii. figs. 12,  
13; Angelin, 1851, Palæont. Succ. p. 5, pl. vi.; Barrande, 1852, Syst.  
Sil. de la Bohême, p. 819; H. Hicks, 1871, Quart. Journ. Geol. Soc.  
vol. xxvii. p. 400.

*Agnostus Barlowii*, Belt, 1868. Lower Tremadoc Beds, Rhiwfelyn,  
North Wales.

*Agnostus Barlowii*, Belt, Geol. Mag. vol. v. p. 11, pl. ii. figs. 17, 18.

*Agnostus Barrandei*, Salter, MS., Hicks, 1872. Menevian Group,  
St. Davids.

*Agnostus Barrandei*, Salter, MS.; Hicks, 1872, Quart. Journ. Geol. Soc.  
vol. xxviii. p. 176, pl. v. figs. 5, 6.



- Agnostus cambrensis**, Hicks, 1871. Longmynd Rock, Nun's Well,  
St. Davids.  
*Agnostus cambrensis*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 400,  
pl. xvi. figs. 11, 12.
- Agnostus Davidis**, Salter, 1865. Menevian Group, St. Davids, and  
near Dolgelly, North Wales.  
*Agnostus Davidis*, Salter, 1865, Brit. Assoc. Report, p. 285; Hicks, 1872,  
Quart. Journ. Geol. Soc. vol. xxviii. p. 174, pl. v. figs. 2-4.
- Agnostus Eskriggei**, Hicks, 1872. Menevian Group, St. David's,  
and near Dolgelly.  
*Agnostus Eskriggei*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 175,  
pl. v. fig. 7.
- Agnostus limbatus**, Salter, 1866. Caradoc, Wexford.  
*Agnostus trinodus*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. 8. fig. 11.  
*A. limbatus*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 298.
- Agnostus**, sp. (allied to *A. limbatus*), Salter. Lower Llandeilo,  
Tai-hirion, Bala.  
*Agnostus*, sp. (allied to *A. limbatus*), Salter, Geol. Surv. Decade xi. pl. 1. fig.  
12; Salter, 1866, l. c. pl. 11a. fig. 7, and woodcut 7.
- Agnostus M'Coyii**, Salter, 1854. Upper Llandeilo Flags, S. Wales.  
*Agnostus pisiformis*?, Murch. Sil. Syst. 1839, pl. xxv. fig. 6 (fig. 4 in text).  
*Diphorrhina triplicata*, M'Coy, 1851, Pal. Foss. Woodw. Mus. pl. 1 E.  
fig. 11.  
*Agnostus M'Coyii*, Salter, 1854, Siluria, 2nd edit. pl. iii. figs. 7, 8; id.  
1864, Decades Geol. Surv. xi. pl. 1. figs. 6, 7; id. 1866, Mem. Geol. Surv.  
vol. iii. p. 291, pl. xiii. fig. 8; id. 1859, in Siluria, 3rd edit. pl. 3. fig. 7;  
Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 10. fig. 5.
- Agnostus Morei**, Salter, 1866. Blacklead-bearing Shale,  
Stiperstones, Shropshire.  
*Agnostus Morei*, Salter, 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 487,  
figs. a, b; 1864, Decade Geol. Surv. xi. p. 7, pl. 1. fig. 13.
- Agnostus nodosus**, Belt, 1867. Lower Lingula-Flags, river  
Mawddach, North Wales.  
*Agnostus nodosus*, Belt, 1867, Geol. Mag. vol. iv. p. 295, pl. xii. fig. 3, a, b.
- Agnostus obtusus**, Belt, 1868. Lingula-Flags, Upper Dolgelly beds,  
Rhiw-felyn, North Wales.  
*Agnostus obtusus*, Belt, 1868, Geol. Mag. vol. v. p. 10, pl. ii. figs. 15, 16.
- Agnostus pisiformis**, Lin., var. *obesus*, Belt, 1867. Lower Lingula-  
Flags, river Mawddach, North Wales.  
*Agnostus pisiformis*, Lin., var. *obesus*, Belt, 1867, Geol. Mag. vol. iv. p. 295,  
pl. xii. fig. 4, a, b, c, d.

**Agnostus princeps**, Salter, 1864. Upper Lingula-Flags, Portmadoc,  
North Wales, Malvern, &c.

*Agnostus pisiformis*, Salter, in *Siluria*, pp. 45, 53, Foss. 4 & 9.

*A. exsculptus*, Angelin, *Pal. Suec. t. 6. f. 8*; *Decades Geol. Surv. no. xi. pl. i. figs. 1-5*.

*A. princeps*, Salter, 1864, *Quart. Journ. Geol. Soc. vol. xx. p. 237, pl. xiii. fig. 8*;  
ib. 1866, *Mem. Geol. Surv. vol. iii. p. 296, pl. iv. figs. 2-11, pl. v. fig. 1*.

**Agnostus trinodus**, Salter, 1864. Caradoc: Haverfordwest, N. Wales,  
Ireland, Ayrshire, and Shropshire.

*Trinodus agnostiformis*, McCoy, 1846, *Sil. Foss. Irel. pl. iv. fig. 3*; *Pal. Foss. Woodw. Mus. t. 1 E. fig. 10*.

*T. tardus*, McCoy, *Pal. Foss. Woodw. Mus. t. 1 E. fig. 19*.

*Agnostus trinodus*, Salter, 1864, *Decades Geol. Surv. no. xi. pl. 1. figs. 8-10*;  
id. 1866, *Mem. Geol. Surv. vol. iii. p. 297, pl. xix. fig. 8*.

*Agnostus*  $\beta$ . *convexus*, Salter, 1848, *Mem. Geol. Surv. vol. ii. pl. 8. figs. 12, 13*.

**Agnostus trisectus**, Salter, 1864. Black Shale, Lingula-Flags,  
Rhiw-felyn, N. Wales.

*Agnostus trisectus*, Salter, 1864, *Geol. Surv. Decade xi. pl. 1. fig. 10*; Belt,  
1868, *Geol. Mag. vol. v. p. 11*.

**Agnostus scarabæoides**, Salter, 1865. Menevian Group, St. Davids.

*Agnostus scarabæoides*, Salter, 1865, *Brit. Assoc. Report*; Hicks, 1872, *Quart. Journ. Geol. Soc. vol. xxviii. p. 175, pl. v. fig. 8*.

**Agnostus scutalis**, Salter, 1865. Menevian Group, St. Davids, and  
near Maentwrog and Dolgelly.

*Agnostus scutalis*, Salter, 1865, *Brit. Assoc. Report*, p. 285; Hicks, 1872,  
*Quart. Journ. Geol. Soc. vol. xxviii. p. 175, pl. v. figs. 9-14*.

### AMPHION, Pander, 1830.

*Amphion*, Pander, 1830, *Beiträge zur Geognos. des Russisch.*; Portlock,  
1840, *Geol. Report of Tyrone*; Salter, 1864, *Mon. Pal. Soc. p. 80*.

*Distribution*. Lower Silurian.

**Amphion benevolens**, Salter, 1864. Caradoc Slate,  
Newtown, Waterford.

*Amphion benevolens*, Salter, 1864, *Mon. Pal. Soc. pt. 1, pl. vi. fig. 31*.

**Amphion pauper**, Salter, 1864. Caradoc Rocks, Tramore.

*Amphion pauper*, Salter, 1864, *Mon. Pal. Soc. pt. 1, pl. vi. fig. 32*.

**Amphion pseudo-articulatus**, Portlock, 1840. Caradoc Slate,  
Tramore, Waterford.

*Amphion pseudo-articulatus*, Portlock, 1840, *Geol. Report Londonderry and Tyrone*, pl. iii. fig. 5; Salter, 1859, *Siluria*, 2nd edit. p. 537; 1864, *Mon. Pal. Soc. pt. 1, pl. vi. figs. 29, 30*.

**AMPYX**, Dalman, 1836.

*Ampyx*, Dalman, 1836, Palaeod. ; Murch. 1839, Sil. Syst. p. 669 ; Forbes, 1849, Decade ii. Geol. Surv. ; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 321 ; Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 182.

*Distribution.* Cambrian and Silurian.

***Ampyx nudus***, Murchison, sp., 1839. Llandeilo Flags, near Builth,  
S. Wales.

*Trinnucleus nudus*, Murch. 1839, Sil. Syst. p. 660, pl. 23. fig. 5.

*Ampyx nudus*, Forbes, 1849, Decade Geol. Surv. ii. pl. x.

***Ampyx parvulus***, Forbes, 1848. Lower Ludlow Rocks, Vinnal Hill,  
Ludlow.

*Ampyx parvulus*, Forbes, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. x. p. 350.

***Ampyx prænuntius***, Salter, 1866. Upper Tremadoc, Pen-y-clogwyn,  
Tremadoc.

*Ampyx prænuntius*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 321, pl. 8.  
fig. 5.

***Ampyx Salteri***, Hicks, 1875. Middle Arenig, Slate Quarry,  
Whitesand Bay, St. Davids.

*Ampyx Salteri*, Hicks, 1875, Cat. Camb. & Sil. Foss. p. 22 ; 1875, Quart.  
Journ. Geol. Soc. vol. xxxi. p. 182, pl. x. figs. 7, 8.

***Ampyx tumidus***, Forbes. Caradoc, Rhiwlas, Bala.

*Ampyx tumidus*, Forbes, Decade ii. Geol. Surv. pl. x. p. 4 ; Salter, 1866,  
Mem. Geol. Surv. vol. iii. p. 320, pl. 23. fig. 6, woodcut 9.

**ANOPOLENUS**, Salter, 1864.

*Anopolenus*, Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 236 ; Hicks,  
1872, ib. vol. xxviii. p. 179.

*Distribution.* Cambrian.

***Anopolenus impar***, Hicks, 1872. Menevian Group, St. Davids and  
Maentwrog.

*Anopolenus impar*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 179,  
pl. vii. figs. 1-7.

***Anopolenus Henrici***, Salter, 1864. Lingula-Flags.

*Anopolenus Henrici*, Salter, Quart. Journ. Geol. Soc. vol. xx. p. 236, pl. xiii.  
figs. 4, 5 ; ib. vol. xxi. p. 480, woodcuts 2, 3.

***Anopolenus Salteri***, Hicks, 1865. Lingula-Flags, St. Davids.

*Anopolenus Salteri*, Hicks, 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 478,  
woodcut 1 ; id. 1872, ib. vol. xxviii. p. 179, pl. vii. figs. 8-11.

**ANGELINA**, Salter, 1859.

*Angelina*, Salter, 1859, in *Siluria*, 2nd edit. p. 53; 1864, *Geol. Surv.* Decade xi.

*Distribution.* Cambrian.

**Angelina Sedgwickii**, Salter, 1859. Upper Tremadoc Slate, Garth,  
Portmadoc; Yuys Tywyn, N. Wales.

*Angelina Sedgwickii*, Salter, 1859, in *Siluria*, 2nd edit. p. 53, fig. 2, Foss. 9  
(*A. subarmata*, ib. fig. 3); 1865, *Decades Geol. Surv.* no. 11, pl. vii. figs. 1-5;  
1866, ib. vol. iii. p. 308, pl. vii. figs. 1-5.

**ARIONELLUS**, Barrande, 1852.

*Arionellus*, Barrande, 1852, *Syst. Silur. Bohême*, vol. i. p. 404; Hicks,  
1872, *Quart. Journ. Geol. Soc.* vol. xxviii. p. 176.

*Distribution.* Cambrian, Silurian.

**Arionellus longicephalus**, Hicks, 1872. Menevian Group, St. Davids,  
and near Maentwrog, N. Wales.

*Arionellus longicephalus*, Hicks, 1872, *Quart. Journ. Geol. Soc.* vol. xxviii.  
p. 176, pl. v. figs. 20-23.

**ASAPHUS**, Brongn. 1822.

*Asaphus*, Brongn. 1822, *Crust. Foss.*; Murch. 1837, *Sil. Syst.*; Milne-Edw.  
1840, *Crust. vol. iii.* p. 310; Salter, 1849, *Decade ii. Geol. Surv.*; Wyatt-  
Edgell, 1867, *Geol. Mag.* vol. iv. p. 15.

*Brongniartia*, Eaton, 1832, *Text-book*.

*Isotelus*, Portlock, 1843, *Geol. Rep. Tyrone*, p. 299; McCoy, 1851, *Synops.*  
Woodw. *Pal. Foss.* p. 171.

Subgenera :—

a. *Ptychopyge*, Angelin, 1854.

b. *Basilicus*, Salter, 1849.

c. *Isotelus*, De Kay, 1824.

d. *Cryptonymus*, Eichwald, 1825.

e. *Brachyaspis*, Salter, 1866.

*Distribution.* Cambrian and Silurian.

**Asaphus (Isotelus) affinis**, McCoy, 1851. Upper Tremadoc Slate,  
Pen-y-clogwyn and Garth, Penrhyn.

*Isotelus affinis*, McCoy, 1851, *Pal. Foss. Woodw. Mus.* pl. i. F. fig. 3.

*Asaphus affinis*, Salter, 1866, *App. Ramsay Geol. N. Wales, Mem. Geol. Surv.*  
vol. iii. p. 310, pl. viii. fig. 15; 1866, *Pal. Soc. Mon. pt. 3*, pl. xxiv.  
figs. 13, 14.

*Asaphus (Isotelus) affinis*, Salter, 1866, *Mem. Geol. Surv.* vol. iii. p. 310,  
pl. viii. fig. 15, pl. xii. fig. 4; 1873, *Cat. Cam. & Sil. Foss.* p. 17.

**Asaphus (Ptychopyge) corndensis**, Murch. 1839. Llandeilo Flags,  
Gilwern, Builth, and Corndon Mountain.

*Asaphus corndensis*, Murch. 1839, *Sil. Syst.* pl. xxv. fig. 4; Salter, 1859,  
*Siluria*, 2nd edit. pl. iii. fig. 4.

*A. (Ptychopyge) corndensis*, Salter, 1866, *Mon. Pal. Soc. pt. 3*; 1873, *Cat. Camb.*  
& *Sil. Foss.* p. 32, pl. xvi.; Wyatt-Edgell, 1867, *Geol. Mag.* vol. iv. p. 15.

**Asaphus (Isotelus) gigas**, De Kay, 1824. Caradoc Rocks, Desertcreat.

*Isotelus gigas* et *I. planus*, De Kay, 1824, Annals of Lyceum New York, vol. i. p. 176, pls. xii. & xiii. fig. 1; Portlock, 1843, Geol. Report, p. 295, pl. vii. figs. 2, 3, pl. viii. fig. 7.

*I. gigas*, Milne-Edw. 1840, Crust. vol. iii. p. 298.

*Asaphus (Isotelus) gigas*, Salter, 1864, Mem. Geol. Surv. Decade xi. sec. 3, p. 1, pl. iii.; id. 1866, Mon. Pal. Soc. pt. 3, pl. xxiv. figs. 1-5, pl. xxv. fig. 1.

**Asaphus (Isotelus) Homfrayi**, Salter, 1866. Upper Tremadoc Slate, Garth, Tremadoc, and Tw-hwnt-yr-bwlch, near Portmadoc.

*Asaphus Homfrayi*, Salter, 1866, App. Ramsay Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 311, pl. viii. figs. 11-14; 1866, Mon. Pal. Soc. pt. 3, pl. xxiv. figs. 6-12; 1873, Cat. Camb. & Sil. Foss. p. 17.

**Asaphus? (Basilicus) hybridus**, Salter, 1866. Llandeilo Flags, Henllan, Amgoed, Carmarthenshire.

*Asaphus? (Basilicus) hybridus*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xxiii. figs. 8, 9.

**Asaphus (Basilicus) laticostatus**, Salter, 1866. Llandeilo Flags, Maen Goran, Builth, Radnorshire.

*Isotelus (Basilicus) laticostatus*, McCoy, 1851, Pal. Foss. Woodw. Mus. pl. i. E. fig. 18a.

*Asaphus (Basilicus) laticostatus*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xviii. fig. 6.

**Asaphus (Basilicus) Marstoni**, Salter, 1866. Caradoc Shale, Horderly, Shropshire.

*Asaphus (Basilicus) Marstoni*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xxiii. fig. 1.

**Asaphus Menapiæ**, Hicks, 1873. Upper Arenig Rocks, Whitesand Bay; Base of the group, Ramsey I., St. Davids.

*Asaphus Menapiæ*, Hicks, 1873, Cat. Camb. & Sil. Foss. p. 23.

**Asaphus (Basilicus) peltastes**, Salter, 1866. Llandeilo Flags, Llandeilo, S. Wales; Volcanic Grit, Builth, Radnorshire, and Abereiddy Bay, Pembrokeshire.

*Asaphus (Basilicus) peltastes*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xxii. figs. 1-4.

*A. peltastes*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 34.

**Asaphus (Basilicus) Powisii**, Murch. 1837. Llandeilo Flags, Anglesea; Caradoc or Bala Rocks, N. Wales; and Caradoc, Shropshire.

*Asaphus Powisii*, Murch. 1837, Sil. Syst. t. xxiii. fig. 9; Salter, 1849, Mem. Geol. Surv. Decade ii. pl. iii. p. 5; 1859, Siluria, 2nd edit. t. ii. fig. 2; 1866, App. Ramsay, Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 312, pl. xv.; 1866, Mon. Pal. Soc. pt. 3, pl. xxiii. figs. 1-7.

*Isotelus Powisii*, McCoy, 1851, Pal. Foss. Woodw. Mus. p. 170.

**Asaphus (Basilicus?) radiatus**, Salter, 1866. Caradoc, Rhiwlas; Bala, Berwyn Mountains and co. Louth, Ireland.

*Ogygia radiata*, Salter, 1846, App. to Ray edit. of Burm. Org. Tril. p. 125.

*Isotelus (Basilicus) laticostatus*, McCoy, 1853, Pal. Foss. Woodw. Mus. pl. i. E. fig. 18.

*Asaphus radiatus*, Salter, 1863, App. Ramsay Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 311, pl. xxiii. fig. 7.

*A. (Basilicus) radiatus*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xviii. figs. 1-5.

**Asaphus (Brachyaspid) rectifrons**, Portlock, 1843. Llandeilo Flags (?), Bogang or Bagan, Knockdollian, Ayrshire.

*Isotelus rectifrons*, Portlock, 1843, Geol. Rep. p. 298, pl. ix. fig. 1, *a*, *b*, and pl. viii. figs. 2, 3, 7; Salter, 1864, Mem. Geol. Surv. Decade xi. sec. 3, p. 4.

*I. arcuatus*, Portlock, 1843, ib. pl. ix. figs. 2, 3.

*I. (Brachyaspid) rectifrons*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xxv. figs. 6-10.

**Asaphus (Cryptonymus) scutalis**, Salter, 1864. Caradoc, Tyrone.

*Isotelus lariceps*, Portl. 1843, Geol. Report, p. 299, t. ix. fig. 4.

*A. (Cryptonymus) lariceps?*, Salter, 1864, Decade xi. Geol. Surv., described as *A. gigas*, sec. 5, p. 4.

*A. (C.) scutalis*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xxv. figs. 2, 3.

**Asaphus solvensis**, Hicks, 1873. Lower Arenig Rocks, Tremenhcerc, near Solva.

*Asaphus solvensis*, Hicks, 1873, Cat. Camb. & Sil. Foss. p. 23.

**Asaphus (Isotelus)**, sp. indet., Salter, 1866. Llandeilo Flags (?), Bogang or Bagan, Knockdollian, Ayrshire.

*Asaphus (Isotelus)*, sp. indet., Salter, 1866, Quart. Journ. Geol. Soc. vol. vii. pl. viii. fig. 2; id. 1866, Mon. Pal. Soc. pt. 3, p. 168.

**Asaphus (Isotelus?)**, sp. indet., Salter. Caradoc Wrac Limestone, Peeblesshire.

*Asaphus (Isotelus)*, spec. indet., Salter, Quart. Journ. Geol. Soc. vol. iv. p. 205; id. 1866, Mon. Pal. Soc. pt. 3, p. 168.

**Asaphus (Basilicus) tyrannus**, Murch. 1837. Llandeilo Flags, N. & S. Wales, Shropshire, &c.

*Asaphus tyrannus*, Murch. 1837, Sil. Syst. pl. xxiv. fig. 4, pl. xxv. fig. 1; Milne-Edw. 1840, Crust. vol. iii. p. 310; Salter, 1849 (1848), Decade ii. Geol. Surv. pl. v.; id. 1859, Siluria, 2nd edit. pl. i. fig. 5, pl. ii. fig. 1; Salter (1866, ined.), App. Ramsay Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 312, pl. xiii. figs. 1-6; id. 1866, Mon. Pal. Soc. pt. 3, pls. xxi. and xxii. figs. 5-12.

*Isotelus tyrannus*, McCoy, 1851, Synops. Woodw. Pal. Foss. fasc. i. p. 171.

### BARRANDIA, McCoy, 1849.

*Barrandia*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 409; Salter, 1866, Mon. Pal. Soc. pt. 3; Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 185.

*Asaphus*, Portlock, 1832, Geol. Rep. Tyrone, p. 293.

*Ogygia*, Salter & Phillips, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 239.

*Distribution.* Lower Silurian.

- Barrandia Cordai**, McCoy, 1849. Llandeilo Flags, Peneerrig, near Builth, Radnorshire.  
*Barrandia Cordai*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 409; id. 1851, Synop. Pal. Foss. Woodw. Mus. p. 149, pl. i. F. fig. 1; Salter, 1866, Mon. Pal. Soc. pt. 3, p. 142, pl. xix. fig. 5.
- Barrandia Homfrayi**, Hicks, 1875. Upper Arenig, Llanvirn Quarry.  
*Barrandia Homfrayi*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 185, pl. ix. fig. 8.
- Barrandia longifrons**, Edgell, sp., 1867. Llandeilo Slates, Pembrokeshire.  
*Barrandia longifrons*, Edgell, sp., Salter, Mon. Pal. Soc. 1867, pt. 4, p. 179 (woodcut, fig. 42).
- Barrandia (Homalopteon) Portlockii**, Salter, 1849. Llandeilo Flags, Schists of Newtown Head, Waterford.  
*Asaphus dilatatus*, Portlock, 1832, Geol. Report of Tyrone &c. p. 293, pl. xxiv. fig. 2.  
*Ogygia dilatata*, Salter & Phillips; 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 239.  
*O. Portlockii*, Salter, 1849, Decade Geol. Surv. no. 2, pl. vii. figs. 1, 2, 6, 7.  
*Barrandia (Homalopteon) Portlockii*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xix. figs. 6-10.
- Barrandia (Homalopteon) radians**, McCoy, 1849. Llandeilo Flags, Wellfield, Builth, Radnorshire, Peneerrig, and Gwernyfyd.  
*Ogygia Portlockii* jun., Salter, 1849, Decade Geol. Surv. no. 2, pl. vii. figs. 3, 5.  
*O. radians*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 408; id. 1851, Synop. Pal. Foss. Woodw. Mus. p. 149, pl. i. F. fig. 2.  
*Barrandia*, sp., id. *op. cit.* p. 149, pl. i. G.  
*Barrandia (Homalopteon) radians*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xix. figs. 1-4.
- Barrandia**, sp., Hicks, 1876. (Arenig) Cambrian Shales, near Caernarvon.  
*Barrandia*, sp., Hicks, 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 135.

#### BRACHYMETOPUS, McCoy, 1847.

- Brachymetopus*, McCoy, 1847, Ann. & Mag. Nat. Hist. vol. xx. p. 230; II. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 16.  
*Phillipsia*, Portlock, 1843, Geol. Rep. Londonderry, p. 305; De Vern. Geol. Russ. ii.  
*Distribution*. Lower Carboniferous.
- Brachymetopus discors**, McCoy. Carboniferous Limestone, Ireland.  
*Brachymetopus discors*, McCoy, Carb. Foss. Irel. t. iv. fig. 7; Salter & II. Woodw. 1865, Cat. & Chart Foss. Crust. p. 16, fig. 120.
- Brachymetopus Maccoyi**, Portlock, sp., 1843. Lower Carb., Kildare, Ireland.  
*Phillipsia Maccoyi*, Portlock, 1843, Geol. Rep. Londonderry, p. 309, t. 11. fig. 6.  
*Brachymetopus Maccoyi*, 1847, McCoy, Ann. & Mag. Nat. Hist. vol. xx. p. 230.

**Brachymetopus uralicus**, De Vern. Lower Carboniferous, Derbyshire and Russia.

*Phillipsia uralicus*, De Vern. Geol. Russ. ii. t. 27. fig. 16.

*Phillipsia Jonesii*, De Kon. 1842, Anim. Foss. t. 53. fig. 6.

*Brachymetopus uralicus*, Salter & H. Woodw. 1865, Cat. & Chart Foss Crust. p. 16, fig. 118.

**CALYMENE**, Brongniart, 1822.

*Entomolithes*, Parkinson, 1811, Org. Rem. iii.

*Calymene*, Brongniart, 1822, Crust. Foss. ii. p. 1; Dalman, 1826, p. 36; Murchison, 1839, Sil. Syst. p. 653; Milne-Edwards, 1840, Crust. iii. p. 320; Burmeister, 1843, Org. Trilob.; Portlock, 1843, Geol. Rep. Londond.; Salter, 1848, Mem. Geol. Surv. vol. ii. pl. 1; M'Coy, 1851, Pal. Foss. Woodw. Mus.

*Distribution.* Cambrian and Silurian.

**Calymene Blumenbachii**, Brong. 1822. Caradoc, Ireland; Lower Llandovery, Wales, Ayrshire; Woolhope and Wenlock beds, Great Britain and Ireland, and Upper and Lower Ludlow Rocks.

*Calymene Blumenbachii*, Lyttelton, 1750, Phil. Trans. vol. xvi. pls. i. & ii. p. 598; Brongniart, 1822, Crust. Foss. ii. 1, pl. i. fig. 1, A-C.

*C. niagarensis*, Hall, 1843, Geol. Report 4th District, p. 101, fig. 3.

*C. subdiademata*, M'Coy, 1851, Pal. Foss. Woodw. Mus. pl. i. F. fig. 9.

*C. Blumenbachii*, Salter, 1865, Mon. Pal. Soc. pt. 2, pl. viii. figs. 7-16, and pl. ix. figs. 1, 2.

*C. Blumenbachii*, id. 1866, Decade Geol. Surv. vol. iii. p. 326, pl. xvii. figs. 1-7.

Var. *Alportiana*, Salter, 1865, Mon. Pal. Soc. pt. 2, woodcut, fig. 20, p. 95.

**Calymene Blumenbachii**, var. **Caractaci**. Caradoc Rocks of Shropshire, N. Wales, Ireland, and Westmoreland.

[*Calymene selencecephala*, Green's Monogr. 1833?, Cast no. 3.]

*C. subdiademata*, M'Coy, 1855, Pal. Foss. Woodw. Mus. pl. i. F. fig. 10.

*C. Blumenbachii*, var. *brevicapitata*, Salter, 1865, Mem. Geol. Surv. vol. iii. pl. xvii. fig. 9.

*C. Blumenbachii*, var. *Caractaci*, Salter, 1865, Mon. Pal. Soc. pt. 2, pl. ix. figs. 3-5.

*C. Blumenbachii*, var. *brevicapitata* or *Caractaci*, Salter, 1866, Decade Geol. Surv. vol. iii. pl. 17. fig. 9.

**Calymene brevicapitata**, Portlock, 1843. Llandeilo Flags, N. & S. Wales.

*Calymene brevicapitata*, Portlock, 1843, Geol. Rep. pl. iii. fig. 3; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 341, pl. xi.

*C. parvula*, Barrande, Trilob. p. 27.

**Calymene Cambrensis**, Salter, 1865. Llandeilo Flags, S. Wales, Lann Mill, Narberth, &c.

*Calymene brevicapitata*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. xi. figs. 3-5; M'Coy, 1855, Pal. Foss. Woodw. Mus. pl. i. F. figs. 4, 5.

*C. Blumenbachii*, var. *cambrensis*, Salter, 1865, Mem. Geol. Surv. vol. iii. pl. xvii. figs. 13, 14.

*C. cambrensis*, Salter, 1865, Mon. Pal. Soc. pt. 2, pl. ix. figs. 12-14.



**Calymene Daviesii**, Salter, 1865. Wenlock Shale, Radnorshire.

*Calymene Daviesii*, Salter, 1865, Mon. Pal. Soc. fig. 23 (woodcut) p. 103.

**Calymene duplicata**, Murchison, 1859. Llandeilo Flags, Shropshire, Wales, and Ireland.

*Asaphus duplicatus*, Murch. 1839, Sil. Syst. pl. xxv. fig. 8.

*Calymene duplicata*, Murch. 1859, Siluria, 2nd ed. pl. iii. fig. 6; Salter, 1865, Mem. Geol. Surv. vol. iii. pl. xvii. figs. 15-20; Salter, 1865, Mon. Pal. Soc. pt. 2, pl. ix. figs. 9-24.

**Calymene Hopkinsoni**, Hicks, 1875. Upper Arenig, Llanvirn Quarry.

*Calymene Hopkinsoni*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 187, pl. x. figs. 4, 5.

**Calymene parvifrons**, Salter, 1855. Arenig or "Skiddaw" Group, Tai-hirion, Wales.

*Calymene parvifrons*, Salter, 1855, Appendix A, p. 3 of Pal. Foss. Woodw. Mus. 2, pl. i. F. fig. 7; McCoy, 1855, ib. p. 167, pl. i. F. fig. 7; Salter, 1859, Siluria, 2nd edit. p. 53, fig. 4; Salter, 1865, Mon. Pal. Soc. pt. 2, pl. ix. figs. 25-28; Salter, 1866, Decade Geol. Surv. vol. iii. p. 325, pl. 12. fig. 3.

*C. parvifrons*, var. *Murchisoni*, Salter, 1865, ib. pl. ix. figs. 26-28.

**Calymene senaria**, Conrad, 1841. Caradoc Rocks, Shropshire, N. Wales, Westmoreland, and Ireland.

*Calymene senaria*, Conrad, 1841, Ann. Geol. Rep. N. Y. p. 49; Salter, 1865, Mon. Pal. Soc. pt. 2, pl. ix. figs. 5-11.

*C. brevicapitata*, Portlock, 1843, Geol. Rep. pl. iii. fig. 3; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. xi. figs. 1, 2; Salter, 1865, Mem. Geol. Surv. vol. iii. pl. xvii. figs. 10-12; McCoy, 1855, Pal. Foss. Woodw. Mus. 165, tab. i. F. figs. 4-6.

*C. Baylei*, id. op. cit. tab. i. F. fig. 8.

**Calymene Tristani**, Brong. 1822. Llandeilo Rocks, Cornwall, Budleigh-Salterton.

*Calymene Tristani*, Brong. 1822, Cr. Foss. 12, pl. i. fig. 2, a-k; Milne-Edwards, 1840, Crust. iii. 320. 5; Burmeister, 1843, Org. Trilob. tab. 2. figs. 7, 8; 1846, Ray ed. p. 40; Salter, 1864, Quart. Geol. Journ. vol. xx. pl. xv. fig. 5; 1865, Mon. Pal. Soc. pt. 2, pl. ix. figs. 15-18.

**Calymene tuberculosa**, Salter, 1848. Wenlock and Ludlow Rocks, Shropshire and Westmoreland.

*Calymene Blumenbachii*, var. *tuberculosa*, Dalman, 1826, Om Palæad. p. 36; Murchison, 1839, Sil. Syst. pl. vii. fig. 5.

*C. tuberculosa*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. xii.; id. 1849, Decade ii. Geol. Surv. pl. viii.; id. 1854, Siluria, 1st edit. pl. xviii. fig. 11; Salter, 1865, Mon. Pal. Soc. pt. 2, pl. viii. figs. 1-6.

*C. Blumenbachii*, var., Hall, 1852, Pal. New York, vol. ii. pl. A 66. fig. 6.

### CHEIRURUS, Beyrich, 1845.

*Cheirurus*, Beyrich, 1845, Ueber einige böhmische Tril. pp. 18, 19; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 322.

*Calymene*, Münster, 1840, Beiträge, vol. iii.; Phillips, 1841, Pal. Foss.; Burmeister, 1846, Organ. Trilob. 2nd edit. p. 116.

*Paradoxides*, Murch. 1837, Sil. Syst.; Milne-Edw. 1840, Crust. iii. p. 343.  
*Arges*, Goldfuss, 1843, Neues Jahrbuch, p. 544; Portlock, 1843, Geol. Rep. 1.

*Amphion*, Portlock, 1843, Geol. Rept. 1.

*Ceraurus*, McCoy, 1849, Ann. & Mag. Nat. Hist. p. 408.

*Sphaerexochus*, Salter, 1849, Mem. Geol. Surv. vol. ii. pt. 1.

*Cyrtometopus*, Angelin, 1855, Palaeont. Suec.

*Eccoptochile*, Salter, 1864, Mon. Pal. Soc. pt. 1.

*Distribution.* Cambrian, Silurian, Devonian.

**Cheirurus (Crotalocephalus) articulatus**, Münster. 1840. Middle Devonian Limestone of Lammaton, Torquay.

*Calymene articulata*, Münster. Beiträge, 1840, vol. iii. pl. v. fig. 7.

*C. Sternbergii*, Phillips, 1841, Pal. Foss. fig. 247; Burn. 1846, Organ. Trilob. 2nd edit. p. 116.

*Cheirurus articulatus*, Salter, 1853, Decade vii. Geol. Surv. pl. i. art. 1, p. 10; id. 1864, Mon. Pal. Soc. pt. 1, p. 61, pl. vi. figs. 7, 8.

**Cheirurus bimucronatus**, Murch. 1837. Caradoc and Llandovery Rocks, Wales and Ireland; May Hill Sandstone, Norbury; Wenlock Limestone and Shales, Ludlow Rocks.

*Paradoxides bimucronatus*, Murch. 1837, Sil. Syst. pl. xiv. figs. 8, 9.

*Cheirurus insignis*, Barrande, 1852, Sil. Syst. Bohême, pl. xii. figs. 1-13.

*C. speciosus*, Salter, Mem. Geol. Surv. vol. ii. pt. 1, pl. vii. figs. 4, 5, 6.

*C. Williamsii*, McCoy, 1849, Ann. & Mag. Nat. Hist. p. 408; McCoy, 1851, Pal. Foss. Woodw. Mus. pl. i. F. fig. 13.

*C. bimucronatus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 63, pls. v. & vi.; Salter, Decade vii. Geol. Surv. pl. ii.; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 323, pl. xviii. figs. 4-6, var. fig. 7.

Var. *α. bimucronatus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 64, pl. vi. figs. 15-17.

Var. *β. centralis*, Salter, 1864, *op. cit.* pl. vi. figs. 9-14 & fig. 18.

**Cheirurus cancrurus**, Salter, 1853. Caradoc Limestone, Ireland.

*Cheirurus gelasinus*, McCoy (not of Portlock), 1846, Synop. Sil. Foss. Ireland, p. 44.

*C. cancrurus*, Salter, 1853, Dec. Geol. Surv. no. 7, art. 2, pl. 11.

*C. cancrurus*, Salter, 1859, Siluria, 2nd edit. p. 538; id. 1864, Mon. Pal. Soc. pt. 1, pl. v. figs. 15 (& 16?).

**Cheirurus (Eccoptochile) Frederici**, n. sp., 1864. Upper Tremadoc Slates, Garth Hill and Portmadoc.

*Cheirurus Frederici*, Salter, Mem. Geol. Surv. vol. v. (ined.) pl. viii. figs. 1-3.

*Eccoptochile Frederici*, Salter, 1864, Mon. Pal. Soc. pt. 1, pl. v. figs. 18-21.

*Cheirurus Frederici*, id. 1866, Mem. Geol. Surv. vol. iii. p. 322, pl. viii. figs. 1-3, woodcut 10.

**Cheirurus gelasinus**, Portlock, 1843. Caradoc, Tyrone, Ayrshire, and Craig Head Limestone.

*Amphion gelasinus*, Portlock, 1843, Geol. Rep. t. iii. fig. 4.

*Arges planospinosus*, id. *ibid.* t. v. fig. 9.

*Cheirurus gelasinus*, Salter, 1851, Quart. Geol. Journ. vol. vii. pl. viii. fig. 1; Salter, 1853, Decade vii. Geol. Surv. art. 2, p. 11; Salter, 1859, Siluria, 2nd edit. p. 538; Salter, 1846, Mon. Pal. Soc. pt. 1, pl. v. figs. 6-8.

- Cheirurus (Actinopeltis) juvenis**, Salter, 1853. Caradoc L., N. & S. Wales, Westmoreland, and Kildare, Ireland.  
*Cheirurus juvenis*, Salter, Mem. Geol. Surv. 1853, vol. ii. pt. 1, pl. vii. figs. 1-3; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 67, pl. v. figs. 9-12; id. 1866, Decade Geol. Surv. vol. iii. p. 321, pl. xviii. figs. 1, 2.  
*Ceraurus clavifrons*, McCoy, 1851, Pal. Foss. Woodw. Mus. t. i. F. fig. 11, t. i. G. fig. 9.

- Cheirurus (Actinopeltis) octolobatus**, McCoy, 1851. Caradoc Sandstone, Bala, Denbighshire.  
*Sphærexochus clavifrons*, Salter, 1849, Mem. Geol. Surv. vol. ii. pt. 1, pl. vii. fig. 3.  
*Ceraurus octolobatus*, McCoy, 1851, Synop. Foss. Woodw. Mus. pl. i. G. fig. 10.  
*Cheirurus octolobatus*, Salter, 1853, Decade Geol. Surv. vii., art. 2, p. 11; Salter, 1864, Mon. Pal. Soc. pt. 1, pl. v. figs. 13, 14; id. 1866, Decade Geol. Surv. vol. iii. p. 323, pl. xviii. fig. 3.  
*Cyrtometopus affinis*, Angelin, 1855, Palæont. Suecica, t. xxxix. fig. 10.

- Cheirurus (Eccoptochile) Sedgwicki**. Llandeilo Flags, Radnorshire and Cardiganshire.  
*Cryphæus Sedgwicki*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 406.  
*Eccoptochile Sedgwicki*, McCoy, 1851, Synop. Pal. Foss. Woodw. Mus. p. 155, pl. i. F. fig. 14; Salter, 1864, Mon. Pal. Soc. pt. 1, pl. v. fig. 17.  
*Cheirurus Sedgwicki*, Salter, 1854, Morris's Catal. 2nd ed. p. 107; Salter, 1859, Siluria, 2nd edit. p. 538.

- Cheirurus speciosus**, Dalm. sp., 1826. Llandeilo Flags, Sholes Hook, Nelsons, Lower Wood.  
*Calymene speciosus*, Dalm. 1826, Palæad. 74.  
*Paralovides bimacronatus*, Murch. 1839, Sil. Syst. t. xiv. figs. 8, 9.  
*Cheirurus speciosus*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 345, pl. vii. figs. 4-7.

### CARAUSIA, Hicks, 1872.

- Carausia*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 177.  
*Distribution*. Cambrian.

- Carausia menevensis**, Hicks, 1872. Menevian Group, Porth-y-rhaw, St. David's.

- Carausia menevensis*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 178, pl. vi. fig. 7.

### CONOCORYPHE, Corda, 1847.

- Conocoryphe*, Corda, 1847, Prodr. Mon. böhm. Tril.; Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 236; Hicks, 1865, Brit. Assoc. Rep. p. 285; Belt, 1868, Geol. Mag. vol. v. p. 9.  
*Conocephalus*, Barr, 1852, Sil. Syst. Boh.  
*Ellipsocephalus*, Salter, 1859, Siluria, 2nd edit. p. 47.  
*Solenopleure*, Angelin, 1855, Palæont. Suec.  
*Distribution*. Cambrian and Siluria.

- Conocoryphe abdita**, Salter, 1866. Upper Lingula-Flags, Ogof-ddu, Cricceeth, N. Wales.

- Conocoryphe abdita*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 306, pl. v. fig. 13.

- Conocoryphe applanata**, Salter, 1865. Menevian Group, Porth-y-rhaw, St. David's, and Dolgelly, N. Wales.  
*Conocoryphe applanata*, Salter, 1865, Brit. Assoc. Rep. p. 285; 1868, Quart. Journ. Geol. Soc. vol. xxv. p. 53, pl. ii. figs. 1, 2, 3, 4, 5.
- Conocoryphe ? bucephala**, Belt, 1868. Upper Lingula-Flags, Festiniog beds, Gwern-y-bareud and Craig-y-Dinas, N. Wales.  
*Conocoryphe bucephala*, Belt, 1868, Geol. Mag. vol. v. p. 10, pl. ii. figs. 1-6.
- Conocoryphe bufo**, Hicks, 1865. Menevian Group, Porth-y-rhaw, St. David's.  
*Conocoryphe bufo*, Hicks, 1865, Brit. Assoc. Rep. p. 285; 1868, Quart. Journ. Geol. Soc. xxv. p. 52, pl. ii. fig. 8.
- Conocoryphe coronata**, Barr. 1852. Menevian beds, in the Waterfall Valley, near Maentwrog.  
*Conocephalites coronatus*, Barr. 1852, Sil. Syst. Boh. pl. 13. fig. 20.  
*Conocoryphe coronata*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 178, pl. vi. fig. 11; Salter, 1873, Cat. Camb. & Sil. Foss. p. 5.
- Conocoryphe (Solenopleura) depressa**, Salter, 1859. Lower Tremadoc, Wern, Renmorfa, N. Wales.  
*Ellipsocephalus depressus*, Salter, Siluria, 1859, 2nd edit. p. 47, Foss. 7. fig. 2.  
*Conocoryphe (Solenopleura) depressa*, Salter, 1866, Mem. Geol. Surv. vol. iii. pl. vi. figs. 1, 2, 3.
- Conocoryphe Homfrayi**, Salter, sp., 1872. Menevian Group of Waterfall Valley, near Maentwrog, N. Wales.  
*Conocoryphe Homfrayi*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii.; Salter, 1873, Cat. Camb. & Sil. Foss. p. 5.
- Conocoryphe humerosa**, Salter, 1865. Menevian Group, Porth-y-rhaw, St. David's.  
*Conocoryphe humerosa*, Salter, 1865, Brit. Assoc. Report, p. 285; Quart. Journ. Geol. Soc. 1868, vol. xxv. p. 54, pl. ii. fig. 7.
- Conocoryphe invita**, Salter, 1865. Upper Lingula-Flags, Renmorfa; Tremadoc, N. Wales.  
*Conocoryphe invita*, Salter, 1865, Decades Geol. Surv. no. xi. pl. vii. fig. 6; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 305, pl. v. figs. 5, 6, 7, pl. vii. fig. 7.
- Conocoryphe ? longispina**, Belt, 1868. Lingula-Flags, Upper Dolgelly beds, Rhew-felyn, N. Wales.  
*Conocoryphe ? longispina*, Belt, 1868, Geol. Mag. vol. v. p. 9, pl. ii. figs. 12-14.
- Conocoryphe Lyellii**, Hicks, 1871. Longmynd Rocks, Headland, Nun's Well, St. David's.  
*Conocoryphe Lyellii*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 399, pl. xvi. figs. 1-7.
- Conocoryphe ? olenoides**, Salter, 1866. Upper Tremadoc, Garth, Portmadoc, N. Wales.  
*Conocoryphe ? olenoides*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 308, pl. viii. fig. 6.

- Conocoryphe ? simplex**, Salter, 1866. Upper Lingula-Flags, Penmorfa, N. Wales.  
*Conocoryphe ? simplex*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 306, pl. v. fig. 17.
- Conocoryphe solvensis**, Hicks, 1871. Longmynd Rocks, Roadside between Solva and Whitechurch, St. David's.  
*Conocoryphe solvensis*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 400, pl. xvi. fig. 8.
- Conocoryphe**, sp., Salter, 1866. Upper Lingula-Flags, Ogof-ddu, N. Wales.  
*Conocoryphe*, sp., Salter, 1866, Mem. Geol. Surv. vol. iii. p. 306, pl. v. figs. 14, 15, 16.
- Conocoryphe ? variolaris**, Salter, 1864. Lingula-Flags, Porth-y-Rhaw, St. David's, S. Wales.  
*Conocoryphe ? variolaris*, Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 236, pl. xiii. figs. 6, 7.
- Conocoryphe ? verisimilis**, Salter, 1866. Lower Tremadoc, Penmorfa, N. Wales.  
*Conocoryphe verisimilis*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 308, pl. vi. fig. 13.
- Conocoryphe vexata**, Salter, 1866. Upper and Lower Tremadoc, Penmorfa, N. Wales.  
*Conocoryphe vexata*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 307, pl. viii. fig. 7.
- Conocoryphe ? Williamsonii**, Belt, 1868. Lingula-Flags, Upper Dolgelly beds, Rhiw-felyn, N. Wales.  
*Conocoryphe ? Williamsonii*, Belt, 1868, Geol. Mag. vol. v. p. 9, pl. ii. figs. 7-11.

### CYBELE, Lovén, 1845.

*Ogygia*?, Portlock, 1843, Rep. Geol. Londonderry, p. 302, pl. v. fig. 10.

*Cybele*, Lovén, 1845, Öfvers. Vetensk. Ak. t. i.; Salter, 1853, Geol. Surv. Decade vii.

*Tethus*, McCoy, 1852, Pal. Foss. p. 159.

*Atractopyge*, Hall and Corda.

*Distribution.* Lower Silurian.

- Cybele rugosa**, Portlock, sp., 1843. Lower Sil., Tyrone, Ireland; Coniston, Westmoreland.

*Ogygia ? rugosa*, Portlock, 1843, Rep. Geol. of Londond., p. 302, pl. v. fig. 10.

*Cybele rugosa*, Salter & McCoy, 1852, App. Pal. Foss. Woodw. Mus. pl. i. G. fig. 8; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 262.

- Cybele verrucosa**, Dalm., sp. Lower Sil., Caradoc: Bala, N. Wales, and Sholes Hole, S. Wales; Bohemia.

*Cybele serrucostata*, Salter (in parte), 1848, Mem. Geol. Surv. vol. ii. pl. i. pl. viii. fig. 9.

*Zethus serrucostata*, McCoy, 1852, Pal. Foss. p. 152, pl. i. G. figs. 6, 7.

*Cybele verrucosa*, Salter, 1853, Geol. Surv. Decade vii. p. 4, pl. iv.; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 12, fig. 48; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 324, pl. xix. fig. 7; Murch. 1867, Siluria, 3rd edit. p. 17, Foss. 65. fig. 2.

**CYPHASPIS**, Burmeister, 1843.

*Cyphaspis*, Burmeister, 1843, Trilob. : Salter, 1853, Geol. Surv. Decade vii. ; Murch. 1867, Siluria.

*Harpes*, M'Coy, 1846, Synops. Sil. Foss. Ireland.

*Harpidella*, M'Coy, 1849, Ann. & Mag. Nat. Hist. vol. iv. p. 412.

*Proteus*, Angelin, 1852, Palæontol. Suec.

*Distribution.* Silurian.

**Cyphaspis megalops**, M'Coy, 1846. Llandeilo Flags to Lower Ludlow : Co. Galway, Dublin ; Girvan, Ayrshire ; Corwen, N. Wales ; Dudley, Malvern, &c.

*Harpes? megalops*, M'Coy, 1846, Synops. Sil. Foss. Irel. pl. iv. fig. 5.

*Harpidella megalops*, id. 1849, Ann. & Mag. Nat. Hist. vol. iv. p. 412.

*Cyphaspis megalops*, Salter, 1853, Geol. Surv. Decade vii. pl. v.

**Cyphaspis pygmæus**, Salter, 1853. Silurian, Malvern Hill.

*Proetus elegantulus*, Lovén, 1845, Öfvers. Kongl. Vetensk. Akad. t. i. fig. 4 ; Angelin, 1852, Palæontol. Suec. t. xvii. fig. 7.

*Cyphaspis pygmæus*, Salter, 1853, Geol. Surv. Decade vii. p. 6, note.

**CYPHONISCUS**, Salter, 1852.

*Cyphoniscus*, Salter, 1852, Rep. Brit. Assoc. p. 57.

*Distribution.* Silurian.

**Cyphoniscus socialis**, Salter, 1852. Llandeilo Flags, Chair of Kildare, Ireland.

*Cyphoniscus socialis*, Salter, 1852, Rep. Brit. Assoc. p. 57 ; Salter, 1853, Geol. Surv. Decade vii. pl. ix. ; Murch. 1867, Siluria, p. 517, foss. 48. fig. 8.

**DALMANNIA**, Emmr. 1845.

*Dalmannia*, Emmr. 1845, in Leonh. & Bronn's N. Jahrb. ; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 337.

*Distribution.* Upper Silurian.

**Dalmannia affinis**, Salter, 1848. Upper Silurian, Llandowror ; Lower Silurian, Ayrshire.

*Dalmannia affinis*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 337, pl. v. fig. 5.

**DIKELOCEPHALUS**, Dale Owen, 1852.

*Dikelocephalus*, D. Owen, 1852, Rep. on Minnesota and Wisconsin ; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 303.

*Distribution.* Cambrian.

**Dikelocephalus? (Centropleura?) celticus**, Salter, 1866. Upper Lingula-Flags, Ogof-ddu, N. Wales.

*Dikelocephalus? (Centropleura?) celticus*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 304, pl. v. figs. 21, 22.

**Dikelocephalus? (Centropleura?) discoidalis**, Salter, 1866. Upper Lingula-Flags, Ogof-ddu, Criccieth, N. Wales.

*Dikelocephalus? (Centropleura?) discoidalis*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 304, pl. v. figs. 18, 19.

**Dikelocephalus (Centropleura?) furca**, Salter, 1866. Upper Tremadoc, Moel-y-gest, and Penmorfa, N. Wales.

*Dikelocephalus (Centropleura?) furca*, Salter, 1866, Mem. Geol. Surv. vol. iii. pp. 303 & 304, pl. vi. fig. 4, & pl. viii. figs. 9, 10.

**Dikelocephalus? (Centropleura?)**, sp., Salter, 1866. Upper Lingula-Flags, Ogof-ddu, Criccieth, N. Wales.

*Dikelocephalus? (Centropleura?)*, sp., Salter, 1866, Mem. Geol. Surv. vol. iii. p. 305, pl. v. fig. 20.

### DIONIDE, Barrande, 1847.

*Dione*, Barrande, 1846, Not. Prelim. p. 32, Trilob. Bohm.

*Dionide*, Barrande, 1847, N. Jahrb. f. Miner. Heft iv. p. 391; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 321.

*Polytomurus*, Corda, 1847, Prodr. p. 37.

*Distribution.* Lower Silurian.

**Dionide atra**, Salter, 1866. Lower Llandeilo, Ty-obry.

*Dionide atra*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 321, pl. 11a. fig. 9.

### ECCOPTOCHILE, Corda, 1847.

*Cryphæus*, McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 406.

*Eccoptochile*, Corda, 1847, Böhm. Trilob. Prodr. p. 129, tab. vi. fig. 69;

McCoy, 1855, Pal. Foss. p. 155; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 13.

*Distribution.* Lower Silurian.

**Eccoptochile Sedgwickii**, McCoy, 1855. Lower Silurian, Builth, Radnorshire.

*Cryphæus Sedgwickii*, McCoy, 1849, Ann. & Mag. Nat. Hist. ser. 2, vol. iv. p. 406.

*Eccoptochile Sedgwickii*, McCoy, 1855, Pal. Foss. p. 155, pl. i. F. fig. 14; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 13.

### ENCRINURUS, Emmrich, 1845.

*Entomostracites*, Wahlenb. 1821, Act. Soc. Sci. Upsal. vol. viii. p. 32.

*Culymene*, Brong. 1822, Crust. Foss.; Murch. Sil. Syst. p. 655.

*Phacops*, Emmrich, 1839, Dissert. Trilob. i. p. 20.

*Asaphus*, Buckland, 1836, Bridgewater Treatise.

*Amphion*, Portlock, 1843, Report Geol. Londonderry, p. 291.

*Ampyx*, Portlock, 1843, Report Geol. Londonderry, p. 258.

*Cybele*, Salter, 1848, Mem. Geol. Surv. vol. ii. pl. 1; Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 404.

*Zethus*, McCoy, 1851, Pal. Foss. fasc. i. p. 156.

*Encrinurus*, Salter, 1853, Geol. Surv. Decade vii.; Murch. 1867, Siluria, p. 517.

*Distribution.* Silurian.

**Encrinurus multisegmentatus**, Portl., sp., 1843. Lower Silurian, Kelley, Tyrone, Ireland.

*Amphion multisegmentatus*, Portlock, 1843, Geol. Report, p. 291, t. 3. fig. 6.

*Ampyx? baccatus*, Portlock, 1843, ib. p. 262, pl. iii. fig. 11.

*Encrinurus multisegmentatus*, Salter, 1853, Decade vii. p. 4; Murch. 1867, Siluria, p. 517.

**Encrinurus (Cybele) punctatus**, Wahlenberg, sp., 1821. Wenlock Limestone, Dudley.

*Entomostracites punctata*, Wahlenb. 1821, Act. Soc. Sci. Upsal. vol. viii. p. 32, t. 2. fig. 1.

*Calymene punctata*, Murch. 1839, Sil. Syst. p. 23, fig. 8.

*Calymene variolaris*, Brong. 1822, Crust. Foss. tab. 1. fig. 3a.

*Asaphus tuberculatus*, Buckl. 1836, Bridg. Treat. pl. 46. fig. 6.

*Cybele punctata*, Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 403, pl. xxxii. figs. 1-5.

*Encrinurus punctatus*, Salter, 1853, Decade vii. pl. iv. figs. 15, 16.

**Encrinurus punctatus**, var.  $\beta$ . **arenaceus**, Salter. Upper Bala and Ludlow, Bogmine, Shropshire.

*Encrinurus punctatus*, var.  $\beta$ . *arenaceus*, Salter, 1853, Geol. Surv. Decade vii. pl. iv. p. 6; id. Cat. Camb. & Sil. Foss. 1873, p. 77.

**Encrinurus sexcostatus**, Salter. Caradoc, Bala, &c., N. Wales; Shoals-hook, Haverfordwest, &c., S. Wales.

*Cybele sexcostata*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. 8. fig. 10.

*Zethus sexcostatus*, McCoy, 1851, Pal. Foss. fasc. i. p. 156.

*Encrinurus sexcostatus*, Salter, 1852, ib. Appendix A, vol. iv. pl. i. G. figs. 6, 7; 1853, Decade Geol. Surv. vii. pl. 4. figs. 1-11; 1866, Mem. Geol. Surv. vol. iii. p. 324, pl. 19. figs. 5 & 6.

**Encrinurus (Cybele) variolaris**, Brong., sp., 1822. Wenlock Limestone, Dudley.

*Calymene variolaris*, Brong. 1822, Crust. Foss. tab. i. fig. 3 b; Murch. Sil. Syst. p. 655, pl. xiv. fig. 1.

*Phacops variolaris*, Emmrich, Trilob. i. 20. 4.

*Cybele variolaris*, Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 404, pl. xxxii. figs. 6-10.

*Encrinurus variolaris*, Salter, 1853, Geol. Surv. Decade vii. pl. iv. figs. 13, 14.

### ERINNYS, Salter, 1865.

*Erimys*, Salter, 1865, Brit. Assoc. Report, Sect. C; Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 177; Salter, 1873, Cat. Camb. & Sil. Foss. p. 5.

*Distribution.* Cambrian.

**Erinnys venulosa**, Salter, 1865. Menevian group, St. David's, Waterfall Valley, near Maentwrog.

*Erimys venulosa*, Salter, 1865, Brit. Assoc. Report, p. 285; Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 177, pl. vi. figs. 1-6.

### GRIFFITHIDES, Portlock, 1843.

*Asaphus*, Phillips, 1836, Geol. Yorks. p. 240.

*Griffithides*, Portlock, 1843, Report Geol. Londond. p. 312; McCoy, 1844, Carb. Foss. p. 160; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 16.

*Phillipsia*, De Kon. 1844, Descr. Anim. Foss. t. 53. fig. 1.

*Distribution.* Carboniferous Limestone.



**Griffithides mucronatus**, M'Coy, sp., 1844. Carboniferous Limestone, Northumberland, Ireland, Russia.

*Phillipsia Eichwaldi*, Fisch. sp., Vern. Geol. Rus. t. 2, 7. fig. 14.

*P. mucronatus*, M'Coy, 1844, Carb. Foss. Ireland, table 4, fig. 5.

*Griffithides calcaratus*, M'Coy, 1844, Carb. Foss. Ireland, p. 160, pl. iv. fig. 3.

*G. Eichwaldi*, Vern. 1845, Geol. Russ. vol. ii. p. 376, tab. xxvii. fig. 14; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 16, fig. 116; Möller, 1867, Bull. de la Soc. Nat. Moscou, pt. 1, p. 121.

*G. mesotuberculatus*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 406; id. 1851, Pal. Foss. p. 182, pl. 3 d. figs. 10, 11.

*G. farnensis*, Tate, 1856, Proceed. Berwick Club, p. 234.

*G. mucronata*, Traquair, 1867, Roy. Geol. Soc. Ireland, figs. 1-7.

**Griffithides globiceps**, Phillips, sp., 1836. Carboniferous L., Great Britain, Ireland, and Belgium.

*Asaphus globiceps*, Phil. 1836, Geol. Yorks. p. 240, pl. xxii. figs. 16-20.

*Phillipsia globiceps*, De Kon. 1844, Descr. Anim. Foss. t. 53. f. 1.

*Griffithides globiceps*, Portl. 1843, Report Geol. Londond. p. 311, t. 11. figs. 9 a, 9 b; M'Coy, 1844, Carb. Foss. p. 160; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 16, fig. 117.

**Griffithides longiceps**, Portlock, 1843. Carboniferous L., Britain.

*Griffithides longiceps*, Portl. 1843, Geol. Report, p. 310, t. 11. figs. 7 a, 7 b.

*G. longispinus*, Portlock, 1843, Geol. Report, p. 312, pl. xxiv. fig. 12; M'Coy, 1844, Carb. Foss. Irel. pp. 160, 161; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 16.

**Griffithides platyceps**, Portl. 1843. Carboniferous Limestone, Tyrone.

*Griffithides platyceps*, Portl. 1843, Report Geol. Londond. p. 311, pl. xi. fig. 8.

### HARPES, Goldf. 1839.

*Harpes*, Goldf. 1839, Nova Act. Acad. Cur. vol. xix.; Portl. 1844, Report Geol. Londond. p. 268; M'Coy, 1855, Synop. Pal. Foss. p. 336; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12; Murch. 1867, Siluria, pp. 518 and 206.

*Distribution.* Cambrian, Silurian, and Devonian.

**Harpes Doranni**, Portlock, 1843. Lower Silurian, Ireland.

*Harpes Doranni*, Portlock, 1843, Report Geol. Londond. and Tyrone, p. 267, pl. v. figs. 4 a, 4 b, 4 c; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12, fig. 42; Murch. 1867, Siluria, p. 518.

**Harpes Flanaganii**, Portlock, 1843. Silurian, Tyrone.

*Harpes Flanaganii*, Portl. 1843, Report Geol. Londond. p. 268, pl. v. figs. 5 a, 5 b, 6, 7; Murch. 1867, Siluria, pp. 518 and 206, Foss. 48, fig. 4.

**Harpes macrocephalus**, Goldf. 1839. Devonian, Britain and Germany.

*Harpes macrocephalus*, Goldf. 1839, Nova Act. Acad. Cur. vol. xix. pl. 33. fig. 2; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12, fig. 44.

**Harpes parvulus**, M'Coy, 1855. Upper Cambrian, Wrae Quarry, Upper Tweed.

*Harpes parvulus*, M'Coy, 1855, Pal. Foss. Synopsis, p. 336, note, pl. 14. fig. 3; Murch. 1867, Siluria, p. 518; Salter, 1872, in Cat. Woodw. Mus. p. 54.

**HOLOCEPHALINA**, Salter, 1864.

*Holocephalina*, Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 237.

*Distribution.* Cambrian.

**Holocephalina inflata**, Hicks, 1872. Menevian Group, St. David's.

*Holocephalina inflata*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 178, pl. vi. figs. 8-10.

**Holocephalina primordialis**, Salter, 1864. Lingula-Flags, Porth-y-Rhaw, St. David's, S. Wales.

*Holocephalina primordialis*, Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 237, pl. xiii. fig. 9.

**HOMALONOTUS**, König, 1825.

*Asaphus*, Brong. 1822, Crust. Foss.; Deslongch. 1825, Trans. Soc. Linn. Calvados, vol. ii. p. 301.

*Homalonotus*, König, 1825, Icones Sectiles; Murch. 1837, Sil. Syst.; Milne-Edw. 1840, Crust. iii. p. 314; Phillips, 1841, Pal. Foss. p. 253; Rouault, 1849, Bull. Soc. Géol. France, 2<sup>e</sup> sér. vol. vi. p. 37; McCoy, 1851, Pal. Foss. p. 168; Salter, 1851, App. Pal. Foss.

*Trimerus*, Green, 1832, Mon. Tril. America.

*Distribution.* Silurian, Devonian.

Subgeneric divisions:—

- |  |  |
|--|--|
| 1. <i>Brongniartia</i> , Salter, 1865. | 4. <i>Dipleura</i> , Green, 1832.      |
| 2. <i>Trimerus</i> , Green, 1832.      | 5. <i>Burmeisteria</i> , Salter, 1865. |
| 3. <i>Kænigia</i> , Salter, 1865.      |  |

**Homalonotus armatus**, Burm. Devonian, Cornwall and Germany.

*Homalonotus armatus*, Burm. pl. iv. fig. 1; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 15, fig. 95.

**Homalonotus bisulcatus**, Salter, 1851. Arenig Group, Llandeilo Flags, Caradoc in Wales and Shropshire.

*Homalonotus bisulcatus*, Salter, 1851, Appendix to Sedgw. & McCoy, Synop. Brit. Pal. Foss. pl. i. G. figs. 24-31; McCoy, 1851, *ibid.* fasc. i. p. 168; Salter, 1859, Siluria, 2nd ed. p. 74, foss. 12. fig. 2; *id.* 1865, Mon. Pal. Soc. pt. 2, p. 105, pl. x. figs. 2-9; *id.* 1866, Mem. Geol. Surv. vol. iii. Appendix, pp. 264, 327, pl. xvi. figs. 1-8, p. 328, pl. xi. a. fig. 8.

**Homalonotus Brongniarti**, Deslongch. 1825. Lower Silurian pebbles in New Red Sandstone, Budleigh-Salterton, Devon.

*Asaphus Brongniarti*, Deslongch. 1825, Trans. Soc. Linn. Calvados, vol. ii. p. 301, pls. xix., xx. (fig. 12?).

*Homalonotus Brongniarti*, Marie Rouault, 1849, Bull. de la Soc. Géol. France, 2<sup>e</sup> sér. vol. vi. p. 379, vol. viii. p. 370; Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 290, pl. xx. fig. 1; 1865, Mon. Pal. Soc. pt. 2, p. 110, pl. x. figs. 15-17, pl. xiii. fig. 9.

**Homalonotus cylindricus**, Salter, 1865. Woolhope Limestone of Woolhope.

*Homalonotus cylindricus*, Salter, 1865, Mon. Pal. Soc. pt. 2, pl. xi. fig. 12, and woodcuts figs. 27, 28, pp. 116, 117.

**Homalonotus (Trimerus) delphinocephalus**, Green, 1832. Woolhope Limestone, Malvern and Dudley; Wenlock and Ludlow Rocks, Marloes Bay, Llandeilo.

*Asaphus cornigerus*, Brong. 1822, Crust. Foss. pl. iv. fig. 10.

*Trimerus delphinocephalus*, Green, 1832, Mon. Tril. N. America, pl. i. fig. 1, Model no. 32.

*Homalonotus delphinocephalus*, Murch. 1837, Sil. Syst. pl. lxxvi. *bis*, figs. 1, 2; 1859, Siluria, 2nd ed. p. 123, foss. 16; Milne-Edw. 1840, Crust. iii. p. 314; Salter, 1865, Mon. Pal. Soc. pt. 2, p. 113, pl. xi. figs. 1-11.

**Homalonotus (Trimerus) Edgelli**, Salter, 1865. Caradoc Beds, Shropshire.

*Homalonotus (Trimerus) Edgelli*, Salter, 1865, Mon. Pal. Soc. pt. 2, p. 108, pl. x. fig. 11 (and fig. 10?).

**Homalonotus (Burmeisteria) elongatus**, Salter, 1865. Lower Devonian, Meadsfoot Sands, South Devon.

*Homalonotus Herschellii*, Phillips, 1841, Pal. Foss. fig. 253.

*Homalonotus elongatus*, Salter, 1865, Mon. Pal. Soc. pt. 2, p. 122, pl. x. figs. 1, 2.

**Homalonotus Johannis**, Salter, 1865. Wenlock Shale, bed of Usk, Monmouthshire, Golden Grove, Llandeilo.

*Homalonotus Johannis*, Salter, 1865, Mon. Pal. Soc. pt. 2, p. 117, pl. xii. fig. 11, pl. xiii. figs. 1-7.

**Homalonotus (Koenigia) Knightii**, König, 1825. Upper Ludlow Rocks, Shropshire, North and South Wales, and Westmoreland.

*Homalonotus (Koenigia) Knightii*, König, 1825, Icones Sectiles, pl. vii. fig. 85; Murch. 1837, Sil. Syst. pl. vii. figs. 1, 2; Milne-Edw. 1840, Crust. iii. p. 315; Salter, 1865, Mon. Pal. Soc. pt. 2, p. 119, pl. xii. figs. 2-10, and pl. xiii. fig. 8.

**Homalonotus ludensis**, Salter, 1865. Upper Ludlow Rocks, Ludlow.

*Homalonotus ludensis*, Murch. 1837, Sil. Syst. pl. vii. fig. 34; Salter, 1865, Mon. Pal. Soc. pt. 2, p. 121, pl. xii. fig. 1.

**Homalonotus (Brongniartia) rudis**, Salter, 1851. Caradoc Rocks of North Wales, Shropshire, and Denbighshire.

*Homalonotus (Brongniartia) rudis*, Salter, 1851, Appen. Sedgw. & M'Coy, Synop. Foss. Woodw. Mus. pl. 1 E. fig. 20; M'Coy, 1851, *ibid.* fasc. i. p. 168; Salter, 1859, Siluria, 2nd ed. p. 539; 1866, Mem. Geol. Surv. vol. iii. p. 328, pl. xvi. figs. 9-11; Mon. Pal. Soc. pt. 2, p. 109, pl. x. figs. 12-14.

**Homalonotus Sedgwicki**, Salter, 1865. Caradoc Slates, Westmoreland.

*Homalonotus Sedgwicki*, Salter, 1865, Mon. Pal. Soc. pt. 2, p. 107, woodcut fig. 25.

**Homalonotus Vicaryi**, Salter, 1865. Llandeilo (or Arenig?) Rocks, Budleigh-Salterton, South Devon.

*Homalonotus Vicaryi*, Salter, 1865, Mon. Pal. Soc. pt. 2, p. 111, pl. xiii. fig. 10.

**Homalonotus**, sp., Salter, 1865. Lower Silurian, Budleigh-Salterton.

*Homalonotus*, sp., Salter, 1865, Mon. Pal. Soc. pt. 2, p. 112, pl. x. fig. 18.

**Homalonotus**, sp., Salter, 1865. Lower Silurian, Gorran Haven,  
Cornwall.

? *Homalonotus bisulcatus*, McCoy, Quart. Journ. Geol. Soc. vol. viii. p. 13.  
II., sp., Salter, 1865, Mon. Pal. Soc. pt. 2, p. 112, fig. 26, woodcut.

**Homalonotus Vulcani**, Murchison, 1859. Llandeilo Flags, Shelve,  
Shropshire.

*Homalonotus Vulcani*, Murch. 1859, Siluria, 2nd ed. pl. ii. figs. 3, 4; Salter?

### ILLÆNUS, Dalman, 1825.

*Illænus*, Dalman, 1825, Palæad. Trilob. 51. 12; Murch. 1839, Sil. Syst.  
p. 661; Emmrich, 1839, Dissert. p. 33; Hall, 1843, Geol. Report New  
York, p. 102; Portlock, 1843, Report Geol. Londond.; McCoy, 1846,  
Syn. Sil. Foss. Irel. p. 54; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1.

*Distribution.* Cambrian and Silurian.

Subgeneric divisions:—

- |   |                                       |
|---|---------------------------------------|
| 1. <i>Octillænus</i> , Salter, 1866.    | 5. <i>Ectillænus</i> , Salter, 1866.  |
| 2. <i>Panderia</i> , Volborth, 1863.    | 6. <i>Hydrolænus</i> , Salter, 1866.  |
| 3. <i>Dysplanus</i> , Burmeister, 1843. | 7. <i>Illænopsis</i> , Salter, 1865.  |
| 4. <i>Illænus</i> proper, Dalman, 1826. | 8. <i>Bumastus</i> , Murchison, 1837. |

**Illænus (Dysplanus) æmulus**, Salter, 1867. May-Hill Sandstone,  
Shropshire.

*Illænus æmulus*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 187, pl. xxviii. fig. 5.

**Illænus Baillyi**, Salter, 1867. Caradoc or Bala, Dunabrattin Head,  
Waterford.

*Illænus Baillyi*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 192, pl. xxviii. fig. 14.

**Illænus (Bumastus) Barriensis**, Murch. 1837. May-Hill Sandstone,  
Malvern; Woolhope Limestone, Hereford-  
shire, and Wenlock Rocks, Llandeilo.

*Illænus (Bumastus) Barriensis*, Murch. 1839, Sil. Syst. p. 656, pl. vi. *bis*;  
Emmrich, 1839, Dissert. p. 33.

I. *Barriensis*, Salter, 1849, Geol. Surv. Decade ii. pl. iii. & pl. iv.; id. 1859,  
Siluria, 2nd ed. p. 123, foss. 16. fig. 2; id. 1867, Mon. Pal. Soc. pt. 4, p. 203,  
pl. xxvii. figs. 1-5.

**Illænus (Dysplanus) Bowmanni**, Salter, 1848. Llandeilo Flags, or  
Lower Bala, N. and S. Wales, Westmoreland, Scotland, Ireland.

*Illænus centrotus*, Portlock, 1843, Geol. Rep. pl. x. figs. 3-6; McCoy, 1846,  
Syn. Sil. Foss. Ireland, p. 54.

I. *Bowmanni*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. viii. figs. 1-3;  
id. 1867, Mon. Pal. Soc. pt. 4, p. 185, pl. xxv. figs. 6-13, pl. xxx. fig. 6; id.  
1866, Mem. Geol. Surv. vol. iii. pl. 18. fig. 8.

**Illænus (Bumastus) carinatus**, Salter, 1867. Wenlock Limestone,  
Winnings Quarry, Malvern.

*Illænus (Bumastus) carinatus*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 209,  
pl. xxvii. figs. 8, 9.

- Illænus Davisii**, Salter, 1849. Caradoc, Bala Lake, Rhiwlas, Pont-y-Glyn, Diffwys, Corwen; Wrae Limestone, Biggar, Peeblesshire.
- Illænus Davisii*, Salter, 1849, Decade ii. Geol. Surv. pl. ii.; McCoy, 1852, Synops. Woodw. Foss. p. 171, pl. i. G. fig. 36; Salter, 1854, Siluria, 1st ed. woodcut 29. fig. 2; id. 1859, Siluria, 2nd ed. p. 223, foss. 44. fig. 2; id. 1865, Mem. Geol. Surv. vol. iii. pl. xviii. fig. 9, p. 317; id. 1867, Mon. Pal. Soc. pt. 4, p. 194, pl. xxix. figs. 10-16.
- Var.  $\beta$ . *involutus*, Salter, 1849, Decade ii. Geol. Surv. pl. ii. fig. 8.
- Illænus Hughesii**, Hicks, 1875. Upper Arenig, Llanvirn Quarry.
- Illænus Hughesii*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 184, pl. ix. fig. 7.
- Illænus (Bumastus) insignis**, Hall. Wenlock Limestone, Dudley and Malvern Hills.
- Illænus Barriensis*, Murch. 1839, Sil. Syst. p. 656, pl. vii. bis, fig. 3, pl. xiv. fig. 7; Hall, 1843, Geol. Rep. New York, p. 102, no. 10. fig. 4, no. 19. fig. 3; Salter, 1859, Decade ii. Geol. Surv. pl. iii. fig. 2, pl. iv. figs. 9-11; id. 1859, Siluria, 2nd ed. pl. xvii. figs. 9-11.
- I. insignis*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 207, pl. xxvii. figs. 6, 7.
- Illænus (Panderia) Lewisii**, Salter, sp. Caradoc or Bala Limestone, Moelydd, Oswestry.
- Illænus (Panderia) Lewisii*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 183, pl. xxvi. figs. 2, 2 a, b.
- Illænus (Bumastus) Maccallumi**, Salter, 1867. Llandovery Sandstone of Mullock, Girvan, Ayrshire.
- Illænus (Bumastus) Maccallumi*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 210, pl. xxviii. fig. 1, and pl. xxx. figs. 2, 3.
- Illænus Murchisoni**, Salter, 1849. Caradoc Limestone, Grug and Birds Hill, Llandeilo.
- Illænus Rosenberghii*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. v. figs. 6-8.
- I. Murchisoni*, Salter, 1852, Sedgw. Synop. Woodw. Mus. fasc. i. Appen. p. iv; id. 1849, Decade ii. Geol. Surv. pl. ii. p. 4; id. 1867, Mon. Pal. Soc. pt. 4, p. 201, pl. xxvi. fig. 1, and pl. xxx. fig. 7.
- Illænus nexilis**, Salter, 1867. Llandovery Schists of Mullock, Girvan, Ayrshire.
- Illænus nexilis*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 190, pl. xxx. figs. 4, 5.
- Illænus ocularis**, Salter, 1849. Caradoc or Bala Limestone, Kildare.
- Illænus ocularis*, Salter, 1849, Geol. Surv. Decade ii. pl. ii. p. 4; id. 1867, Mon. Pal. Soc. pt. 4, p. 198, pl. xxix. figs. 7, 8 (9?).
- Illænus (Ectillænus) perovalis**, Murch. 1839. Llandeilo Flags, Hope Mill, Corndon Mountain, Shropshire; Llanrian, Pembrokeshire.
- Illænus perovalis*, Murch. 1839, Sil. Syst. p. 661, pl. xxiii. fig. 7; Salter, 1854, Siluria, 1st ed. pl. iv. figs. 13, 14; id. 1859, Siluria, 2nd ed. pl. iv. figs. 13, 14; id. 1866, Mem. Geol. Surv. iii. p. 256; id. 1867, Mon. Pal. Soc. pt. 4, p. 211, pl. xxvi. figs. 5-8.

**Illænus Portlockii**, Salter, 1849. Caradoc Schists, Desertcreat, Tyrone.

*Illænus crassicauda*, Portl. 1843, Report Geol. Tyrone, &c. pl. x. figs. 7, 8.

*I. Portlockii*, Salter, 1849, Decade ii. Geol. Surv. pl. ii. p. 3; id. 1859, Siluria, 2nd ed. Appen. p. 539; id. 1867, Mon. Pal. Soc. pt. 4, p. 197, pl. xxvi. figs. 3, 4.

**Illænus Rosenbergii**, Eichwald, 1833. Caradoc, Coniston, Sunny Brow, and Horton, Westmoreland.

*Illænus Rosenbergii*, Eichwald, 1833, Geogn.-zool. per Ingram, Tril. Obs. &c., t. iii. fig. 3?; Salter, 1849, Mem. Geol. Surv. vol. ii. pt. 1, p. 338; McCoy, 1852, Synop. Woodw. Mus. p. 172; Salter, 1867, Mon. Pal. Soc. pt. 4, p. 199, pl. xxix. figs. 2-6.

*I. Murchisoni*, Salter, 1852, Synop. Woodw. Mus. Appen. pl. i. G. figs. 33-35.

**Illænus (Dysplanus) Thompsoni**, Salter. Llandovery Rocks, Ayrshire, Pembrokeshire; May-Hill Sandstone, Builth; Tarannon Shale, Shropshire.

*Illænus (Dysplanus) Thompsoni*, Salter, 1851, Quart. Journ. Geol. Soc. vol. vii. p. 171, pl. ix. fig. 3; id. 1867, Siluria, 3rd edit.; id. 1867, Mon. Pal. Soc. p. 188, pl. xxviii. figs. 2-4, pl. xxx. figs. 8-10.

*Illænopsis (Dysplanus) Thompsoni*, Salter, 1865, Mem. Geol. Surv. vol. iii. p. 360, pl. xi. B. fig. 1.

**Illænus (Illænopsis) Thomsoni**, Salter, 1866. Arenig Rocks, Shelve, Shropshire.

*Illænopsis Thomsoni*, Salter, 1866, Mem. Geol. Surv. vol. iii. pl. xi. B. figs. 1, 2, pp. 256, 316 (not of the May Hill or Upper Llandovery list in p. 360, which is a misprint for *Illænus Thomsoni*); id. 1867, Mon. Pal. Soc. p. 213, pl. xx. fig. 1.

**Illænus (Illænopsis?) acuticaudata**, Hicks, 1875. Upper Arenig, Whitesand Bay.

*Illænopsis? acuticaudata*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 184, pl. ix. fig. 5.

### LICHAS, Dalman, 1826.

*Lichas*, Dalm. 1826, Palæaderna; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 340; Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 235; McCoy, 1855, Pal. Foss. Irel.; Murch. 1867, Siluria, 4th edit. p. 234; Salter, 1873, Cat. Camb. & Sil. Foss. p. 130.

*Peltura*, Milne-Edw. 1840, Crust. vol. iii. p. 345.

*Metopius*, Eichw. Urwelt Russl. 2nd pt.

*Arges*, Beyrich, 1846, Untersuch. über Tril. ii. p. 6.

*Calymene?*, McCoy, 1855, Pal. Foss. Irel.

*Trochurus*, McCoy, 1855, Pal. Foss. Irel. p. 151.

*Distribution.* Cambrian and Silurian.

**Lichas anglicus**, Beyrich, sp., 1846. Wenlock Limestone, Dudley.

*Peltura Bucklandi*, Milne-Edw. 1840, Crust. vol. iii. p. 345, pl. 34. fig. 12.

*Arges anglicus*, Beyrich, 1846, Untersuch. über Trilob. ii. p. 6, pl. 1.

*Lichas Bucklandi*, Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 235, pl. xxvii. figs. 1-5, & xxvii. bis. figs. 1 a, b.

*L. anglicus*, Siluria, 4th edit. 1867, p. 234, foss. 64. fig. 1, and p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 130.

**Lichas Barrandii**, Fletcher, 1850.

Wenlock Limestone, Dudley.

*Lichas Barrandii*, Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 238, pl. xxvii. fig. 10, pl. xxxvii. *bis*. fig. 5; Murch. 1867, Siluria, 4th edit. p. 234, foss. 64. fig. 3, and p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 130.

**Lichas Grayii**, Fletcher, 1850.

Wenlock Limestone, Dudley.

*Lichas*, sp., undescribed, Salter, 1848, Mem. Geol. Surv. vol. i. pt. 2, p. 340, pl. viii. fig. 8.

*L. Grayii*, Murch. 1867, Siluria, 4th edit. p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 130; Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 237, p. 337, pl. xxvii. fig. 8, pl. xxvii. *bis*. figs. 3, 3a, 3b.

**Lichas hirsutus**, Fletcher, 1850.

Wenlock Limestone, Dudley.

*Lichas hirsutus*, Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 236, pl. xxvii. figs. 6, 6a, 7. pl. xxvii. *bis*. figs. 2, 2a; Murch. 1867, Siluria, 4th edit. p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 519.

**Lichas laciniatus**, Dalman, 1826.

Upper Silurian, Coniston, Sweden.

*Lichas laciniatus*, Dalm. 1826, Palæaderna, t. 6. fig. 1; Lovén, 1845, Öfvers. Vetensk.-Akad. t. i. fig. 7; Murch. 1867, Siluria, 4th edit. p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 50.

*L. propinqua*, McCoy, 1855, Pal. Foss. p. 150.

*L. subpropinqua*, id. *ibid.* pl. i. f. fig. 17.

**Lichas laxatus**, McCoy, 1855.

Lower Silurian, Horderley; Bala, Llandeilo, Ayrshire.

*Lichas laxatus*, Salter, 1848, Mem. Geol. Surv. vol. i. pt. 2, p. 340, pl. viii. figs. 4-6; McCoy, 1855, Synops. Sil. Foss. Irel. t. iv. fig. 9; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 324, pl. xix. fig. 1-3; Murch. 1867, Siluria, 4th edit. p. 204, foss. 46. fig. 5, p. 519.

*L. pumila*, McCoy, 1855, Synops. Sil. Foss. Irel. t. iv. fig. 8.

*Calymene? forcipata*, McCoy, 1855, Synops. Sil. Foss. Irel. t. a. fig. 14.

**Lichas nodulosus**, Salter, 1855.

U. Cambrian, Pont-y-Glwn, Diffwys.

*Lichas nodulosus*, Salter, 1855, App. Pal. Foss. p. iv, pl. 1. f. fig. 16; Murch. 1867, Siluria, 4th ser. p. 519.

*Trochurus nodulosus*, McCoy, 1855, Pal. Foss. p. 151, pl. 1. f. fig. 16.

*L. (Trochurus) nodulosus*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 50.

**Lichas patriarchus**, Wyatt-Edgell, 1866.

Llandeilo Flags, Pont-Ladies Quarry, Llandeilo, N. Wales.

*Lichas patriarchus*, Wyatt-Edgell, 1866, Geol. Mag. vol. iii. p. 163, woodcuts 1-6; Murch. 1867, Siluria, 4th edit. p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 33.

**Lichas<sup>\*</sup>Salteri**, Fletcher, 1850.

Wenlock Limestone, Dudley.

*Lichas Salteri*, Fletcher, 1850, Quart. Journ. Geol. Soc. vol. vi. p. 237, pl. xxvii. figs. 9, 9a, pl. xxvii. *bis*. fig. 4; Murch. 1867, Siluria, 4th edit. p. 519; Salter, 1873, Cat. Camb. & Sil. Foss. p. 130.

**Lichas verrucosus**, Eichw. sp.

Wenlock L., Rock Farm, May Hill.

*Metopias verrucosus*, Eichw. Urwelt Russl. 2nd pt. p. 63, t. 3. fig. 23.

*L. verrucosus*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 340, pl. viii. fig. 7; id. 1867, Murch. Siluria, 4th edit. p. 519.

*L. scutalis*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 130.

**MICRODISCUS**, Emmons, 1842.

*Microdiscus*, Emmons, Geol. New York, vol. i. p. 116; Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 237; Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 400.

*Distribution.* Cambrian.

**Microdiscus punctatus**, Salter, 1864. Lower Lingula-Flags,  
Porth-y-Rhaw, St. David's, S. Wales.

*Microdiscus punctatus*, Salter, 1864, Quart. Journ. Geol. Soc. vol. xx. p. 237,  
pl. xiii. fig. 11.

**Microdiscus sculptus**, Hicks, 1871. Longmynd Rocks, Nun's Well,  
St. David's.

*Microdiscus sculptus*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 400,  
pl. xvi. figs. 9, 10.

**NESEURETUS**, Hicks, 1872.

*Neseuretus*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 45.

*Distribution.* Cambrian.

**Neseuretus? elongatus**, Hicks, 1872. Tremadoc Rocks,  
Ramsey Island, Tremanhire.

*Neseuretus? elongatus*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 45,  
pl. iii. figs. 1-3.

**Neseuretus? elongatus**, var. *obesa*, Hicks, 1872, Quart. Journ. Geol.  
Soc. vol. xxix. pl. iii. fig. 4.

**Neseuretus quadratus**, Hicks, 1872. Tremadoc Rocks,  
Ramsey Island and Tremanhire.

*Neseuretus quadratus*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 45,  
pl. iii. figs. 11-13 & 23-26.

**Neseuretus Ramseyensis**, Hicks, 1872. Tremadoc Rocks,  
Ramsey Island and Tremanhire, near St. David's.

*Neseuretus Ramseyensis*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 44,  
pl. iii. figs. 7-10 & 16-22.

**Neseuretus recurvatus**, Hicks, 1872. Tremadoc Rocks,  
Ramsey Island and Tremanhire.

*Neseuretus recurvatus*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 45,  
pl. iii. figs. 5, 6.

**NIOBE**, Angelin, 1852.

*Niobe*, Angelin, 1852; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 314.

*Distribution.* Cambrian.

**Niobe Homfrayi**, Salter, 1866. Upper Cambrian, Lower Tremadoc  
Slates: Penmorfa church, Tremadoc; Castle Deudraeth,  
near Maentwrog, N. Wales.

*Niobe Homfrayi*, Salter, App. Ramsay Geol. N. Wales; id. 1866, Mem. Geol.  
Surv. vol. iii. p. 314. pl. vi. figs. 5-8; id. 1866, Mon. Pal. Soc. pt. 3, p. 143,  
pl. xx. figs. 3-12; id. 1872, Cat. Camb. & Sil. Foss. p. 15.



**Niobe menapiensis**, Hicks, 1872.

Tremadoc Rocks, Ramsey Island  
and Tremanhire.

*Niobe menapiensis*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 46,  
pl. iv. figs. 1-9.

**Niobe solvensis**, Hicks, 1872.

Tremadoc Rocks, Ramsey Island  
and Tremanhire.

*Niobe solvensis*, Hicks, 1872, Quart. Journ. Geol. Soc. vol. xxix. p. 47, pl. iv.  
figs. 10-16.

### OGYGIA, Brongniart, 1822.

*Asaphus*, Brong. 1822, Crust. Foss. t. ii. ; Dalman, 1826, Palæad. p. 68 ;  
J. D. C. Sowerby, 1829, Loudon's Mag. Nat. Hist. vol. ii. ; Murch. 1837,  
Silurian Syst. ; Milne-Edw. 1840, Crust. iii. ; Burmeister, 1843, Org.  
Trilob. ; Corda, 1847, Böhm. Tril. ; Barrande, 1852, Syst. Sil. Bohême.

*Ogygia*, Brong. 1822, Crust. Foss. ; Salter, 1849, Decade ii. Geol. Surv. ;  
Wyatt-Edgell, 1867, Geol. Mag. vol. iv. p. 16 ; Salter, 1873, Cat. Camb.  
& Sil. Foss.

*Distribution.* Cambrian and Silurian.

**Ogygia angustissima**, Salter, 1866.

Llandeilo Flags, Gilwern, Builth.

*Ogygia angustissima*, Salter, 1866, Mon. Pal. Soc. pt. 3, pl. xiv. figs. 8, 9.

*O. convexa*, Wyatt-Edgell, Geol. Mag. 1867, vol. iv. p. 16.

**Ogygia Buchii**, Brongn. 1822. Llandeilo Flags, Shropshire and S. Wales.

*Asaphus de Buchii*, Brongn. 1822, Crust. Foss. t. ii. fig. 2 ; J. D. C. Sowerby,  
1829, Loudon's Mag. Nat. Hist. vol. ii. fig. 27 ; Buckland, 1836, Bridge-  
water Treatise, t. xlv. fig. 7 ; Murch. 1837, Sil. Syst. t. xxv. fig. 2 ; Milne-  
Edw. 1840, Crust. iii. p. 309.

*Ogygia Buchii*, Salter, 1849, Decade ii. Geol. Surv. pl. vi. ; id. 1865, Mon.  
Pal. Soc. pt. 2, p. 125, pl. xiv. figs. 1-7, pl. xv. figs. 1-4.

**Ogygia Buchii junior**, Salter, 1865.

Llandeilo Flags, Builth,  
Shropshire, and S. Wales.

*Trinucleus? asaphoides*, Murch. 1837, Sil. Syst. t. xxiii. fig. 6 ; Milne-Edw.  
1840, Crust. iii. 333.

*Ogygia Buchii junior*, Salter, 1865, Mon. Pal. Soc. pt. 2, p. 125, pl. xiv.  
figs. 5, 6.

**Ogygia bullina**, Salter, 1867.

Arenig Rocks, St. David's.

*Ogygia bullina*, Salter, 1867, Mon. Pal. Soc. pt. 4, p. 178, pl. xxv.\* fig. 5.

**Ogygia peltata**, Salter, 1866.

Arenig Group, St. David's,  
Pembrokeshire.

*Ogygia scutatrix*, Salter, 1859, Siluria, 2nd ed. p. 53, foss. 9. f. 1.

*O. peltata*, Salter, 1866, Append. Ramsay Geol. N. Wales, Mem. Geol. Surv.  
vol. iii. p. 313, pl. xii. fig. 8 ; id. 1866, Mon. Pal. Soc. pt. 3, p. 135, pl. xvii.  
figs. 8-10 ; id. 1867, Mon. Pal. Soc. pt. 4, p. 177 (pl. xvii. figs. 8-10),  
pl. xxv.\* figs. 1-4.

**Ogygia Portlockii**, Salter, 1849. Llandeilo Flags, Newtown Head, Waterford, and Buihth, Radnorshire.

*Asaphus dilatatus*, Portlock, 1832, Rep. Geol. Tyrone, &c. pl. xxiv. fig. 2.

*Ogygia dilatata*, Phillips, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 239.

*O. Portlockii*, Salter, 1849, Geol. Surv. Decade ii. pl. vii.

**Ogygia scutatrix**, Salter, 1859. Lower and Upper Tremadoc Rocks, Merionethshire, Portmadoc; Arenig Group, St. David's.

*Ogygia scutatrix*, Salter, 1859, Siluria, 2nd edit. p. 53, woodcut 9. fig. 1; id. 1866, Append. Ramsay Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 312, pl. viii. fig. 8, & pl. ix. fig. 1; id. 1866, Mon. Pal. Soc. pt. 3, p. 133, pl. xvii. figs. 9-13.

**Ogygia Selwynii**, Salter, 1866. Arenig Group, Hengwrt Ucharf, Dolgelly; White Grit-Mine, Shelve, Shropshire.

*Asaphus Scheynii*, Salter, 1852, Rep. Brit. Assoc. p. 57.

*Ogygia Scheynii*, Salter, 1866, Append. Ramsay Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 313, pl. ix. figs. 2-6, & pl. xi. B. fig. 5; id. 1866, Mon. Pal. Soc. pt. 3, p. 136, pl. xvii. figs. 1-7.

### OLENUS, Dalman, 1827.

*Sphærophthalmus*, Angelin, Pal. Suec.; Belt, 1867, Geol. Mag. vol. v. p. 10.

*Paradoxides*, Brong. 1822, Crust. Foss.

*Entomostracites*, Wahl. Nova Act. Soc. Upsal. vol. viii.

*Peltura*, Milne-Edw. 1840, Crust. vol. iii. p. 344; Angelin, 1855, Palæont. Suecica.

*Olenus*, Dalman, 1827, Palæad.; Phillips, 1848, Mem. Geol. Surv. vol. ii. p. 239; Salter, 1849, Decade ii. Geol. Surv. p. 1; Belt, 1867, Geol. Mag. vol. iv. p. 295.

Subgeneric divisions:—

1. *Parabolina*, Salter, 1849.

2. *Sphærophthalmus*, Salter, 1864.

*Distribution.* Cambrian.

**Olenus (Sphærophthalmus) alatus**, Boeck. Upper Lingula-Flags, Carreg-wen, Borth, Penmorfa church, Tremadoc, Malvern.

*Olenus alatus*, Boeck, Gæa Norvegica, p. 143.

*Sphærophthalmus alatus*, Angelin, Pal. Suec. pl. xxvi. fig. 9.

*Olenus bisulcatus*, Phill. Mem. Geol. Surv. vol. ii. pt. 1, p. 55, figs. 1, 2.

*O. (Sphæ.) alatus*, Salter, 1865, Decade xi. Geol. Surv. pl. viii. fig. 6; id. 1866, Mem. Geol. Surv. vol. iii. p. 302, pl. iv. fig. 3; id. 1873, Cat. Camb. & Sil. Foss. p. 12.

**Olenus bisulcatus**, Phillips, 1848. Black Shale, White-leaved Oak, Malvern.

*Olenus bisulcatus*, Phillips, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 55, fig. 1, and p. 346, Append.; Salter, 1864, Decade xi. Geol. Surv. pl. viii. fig. 6.

*Sphærophthalmus bisulcatus*, Belt, 1868, Geol. Mag. vol. v. p. 10.

**Olenus cataractes**, Salter, 1866. Lower Lingula-Flags, Maentwrog Waterfall, Merionethshire; Treflys, near Portmadoc.

*Olenus cataractes*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 300, pl. v. fig. 23; id. 1864, Decade xi. Geol. Surv. p. 1, pl. x. fig. 14; id. 1873, Cat. Camb. & Sil. Foss. p. 7.

**Olenus (Sphærophthalmus) expansus**, Salter, 1873. U. Lingula-Flags,  
Moel Gron.

*Olenus (Sphærophthalmus) expansus*, Salter, 1873, Cat. Camb. & Sil. Foss.  
p. 12.

**Olenus (Sphærophthalmus) flagellifer**, Angelin? U. Lingula-Flags,  
Carreg-wen.

*Olenus (Sphærophthalmus) flagellifer*, Angelin, Palæont. Suecica, pl. xxvi.  
fig. 7; Salter, 1864, Decade xi. Geol. Surv. pl. viii. figs. 7, 8; id. 1866, Mem.  
Geol. Surv. vol. iii. p. 301, pl. v. figs. 8, 9; id. 1873, Cat. Camb. & Sil. Foss.  
p. 11.

**Olenus gibbosus**, Wahlb., Belt, 1867. Lower Lingula Flags,  
River Mawddach, N. Wales.

*Olenus gibbosus*, Belt, 1867, Geol. Mag. vol. iv. p. 295, pl. xii. fig. 5, *a, b*;  
Salter, 1873, Cat. Camb. & Sil. Foss. p. 7.

**Olenus (Sphærophthalmus) humilis**, Phill. 1848. Upper Lingula-Flags,  
Black Shales, Malvern, Moel Gron, Upper Mawddach.

*Olenus humilis*, Phill. 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 55, figs. 4-6.  
*O. (Sphæroph.) humilis*, Salter, 1865, Decade xi. Geol. Surv. pl. viii. figs. 9-11;  
id. 1866, Mem. Geol. Surv. vol. iii. p. 302, pl. v. fig. 12; id. 1873, Cat. Camb.  
& Sil. Foss. p. 12.

**Olenus impar**, Salter, 1866. Upper Tremadoc Slate, Penellogwyn,  
near Portmadoc.

*Olenus impar*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 302, pl. viii. fig. 4.

**Olenus micrurus**, Salter, 1849. Lower Lingula-Flags, N. Wales.

*Olenus micrurus*, Salter, 1849, Decade ii. Geol. Surv. pl. ix.; id. 1859, Siluria,  
2nd ed. p. 45, foss. 4. fig. 2; id. 1865, Lyell's Elements of Geol. 6th ed.  
p. 573, fig. 663; id. Mem. Geol. Surv. vol. iii. p. 300, pl. ii. figs. 5, 6;  
id. 1873, Cat. Camb. & Sil. Foss. p. 11.

**Olenus (Sphærophthalmus) pecten**, Salter, 1865. U. Lingula-Flags,  
Middle Cambrian, White-leaved Oak, Malvern.

*Olenus (Sphærophthalmus) pecten*, Salter, 1865, Decade xi. Geol. Surv. pl. viii.  
figs. 12, 13; id. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 480, figs. 4, 5;  
id. 1873, Cat. Camb. & Sil. Foss. p. 12.

**Olenus Plantii**, Salter, 1873. Upper Lingula-Flags, Craig-y-Dinas  
and Moel Gron.

*Olenus Plantii*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 11.

**Olenus scarabæoides**, Wahlb. 1822. Upper Lingula-Flags, Tremadoc,  
N. Wales, and Malvern.

*Entomostracites scarabæoides*, Wahl. 1822, Nova Act. Soc. Upsal. vol. viii.  
t. i. fig. 2.

*Olenus scarabæoides*, Dalman, 1827, Palæad. p. 257; Salter, 1859, Siluria,  
2nd edit. Append. p. 540; id. 1865, Decade xi. Geol. Surv. p. 5, pl. viii.  
figs. 1-3; id. 1866, Mem. Geol. Surv. vol. iii. Append. p. 543, pl. v. figs. 2-5.

*Paradoxides scarabæoides*, Brong. 1822, Crust. Foss. p. 34, t. 3. fig. 5.  
*Peltura scarabæoides*, Milne-Edw. 1840, Crust. vol. iii. p. 344; Angelin,  
1855, Palæont. Suecica, pl. xxv. fig. 8.

- O. spinulosus*?, Phill. 1848, Mem. Geol. Surv. vol. ii. pt. 1, pp. 55 & 239.  
*O. (Peltura) scarabæoides*, 1873, Cat. Camb. & Sil. Foss. p. 11.
- Olenus scarabæoides**, var. *obesa*, Salter, 1865, Decade xi. Geol. Surv. p. 5, pl. viii. fig. 4.
- Olenus (Parabolina) serratus**, Salter, 1865. Upper Lingula-Flags, Carreg-wen, N. Wales.  
*Olenus (Parabolina) serratus*, Salter, 1865, Decade xi. Geol. Surv. p. 4, pl. viii. fig. 5; id. 1866, Mem. Geol. Surv. vol. iii. Append. p. 301, pl. v. figs. 6, 7.
- Olenus**, sp., Salter, 1866. Upper Lingula-Flags, Carreg-wen, Portmadoc.  
*Olenus*, sp., Salter, 1866, Mem. Geol. Surv. vol. iii. p. 302, pl. v. figs. 10, 11.
- Olenus (Parabolina) spinulosus**, Wahl. 1822. Black Shale, White-leaved Oak, Malvern, Dolgelly, &c.  
*Paradoxides spinulosus*, Brong. 1822, Crust. Foss. pl. iv. fig. 2.  
*Olenus spinulosus*, Dalman, Palæad. pl. vi. fig. 4; Phillips & Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 55, fig. 3, and p. 347, Append.  
*O. (Parabolina) spinulosus*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 11.

### PALÆOPYGE, Salter, 1856.

- Palæopyge*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 249, pl. iv. fig. 3.  
*Distribution.* Cambrian.
- Palæopyge Ramsayi**, Salter, 1856. Cambrian, Longmynd, Shropshire.

*Palæopyge Ramsayi*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 249, pl. 4. fig. 3; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12, fig. 32; Salter, 1866, Mem. Geol. Surv. iii. p. 244.

### PARADOXIDES, Brongniart, 1822.

- Paradoxides*, Brong. 1822, Crust. Foss.  
*Olenus*, Dalm. 1827, Palæad. 73.  
*Paradoxides*, Milne-Edw. Crust. iii. p. 321; Green, Silliman's Amer. Journ. Sci. & Arts, vol. xxv. p. 336; Burm. 1846, Organ. Trilob. p. 66; Angelin, Palæont. Suecica; Salter, 1859, Siluria, p. 45; Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 399.
- Distribution.* Cambrian.
- Paradoxides Aurora**, Salter, 1865. Menevian Group, Porth-y-Rhaw, St. David's.  
*Paradoxides Aurora*, Salter, 1865, Brit. Assoc. Report, p. 285; id. Quart. Journ. Geol. Soc. 1868, vol. xxv. p. 54, pl. ii. figs. 9-12; id. Cat. Camb. & Sil. Foss. 1873, p. 6.

- Paradoxides Davidis**, Salter, 1863. Lower Lingula-Flags, Porth-y-Rhaw and Solva Harbour Gold Mines, Dolgelly, N. Wales.  
*Paradoxides Davidis*, Salter, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 274, woodcut; id. 1864, ib. vol. xx. p. 234, pl. xiii. figs. 1-3; id. 1864, Decade xi. Geol. Surv. pl. x.; id. 1873, Cat. Camb. & Sil. Foss. p. 7, and woodcut.

**Paradoxides Harknessi**, Hicks, 1871. Lingula-Flags, Nun's Well, St. David's, Road between Solva and Whitechurch.

*Paradoxides Harknessi*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 399, pl. xv. figs. 9-11; id. 1873, Cat. Camb. & Sil. Foss. p. 2; id. 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 170.

**Paradoxides Hicksii**, Salter, 1865. Lingula-Flags, Porth-y-Rhaw, St. David's, near Dolgelly, N. Wales.

*Paradoxides Forchhammeri*, Angelin, Palæont. Suecica, t. ii.; Salter, 1859, Siluria, 2nd edit. p. 45, foss. 5. fig. 2; id. 1864, Decade xi. Geol. Surv. pl. x. fig. 9.

*P. Hicksii*, Salter, 1864, Mem. Geol. Surv. p. 299, pl. iv. fig. 12; id. 1865, Brit. Assoc. Rep. p. 285; id. 1866, Geol. Mag. vol. iii. p. 28; id. 1867, Siluria, 4th edit. p. 44, foss. 6. fig. 2; H. Hicks, 1869, Quart. Journ. Geol. Soc. vol. xxv. p. 55, pl. iii. figs. 1-10; Salter, 1873, Cat. Camb. & Sil. Foss. p. 6.

### PHACOPS, Emmrich, 1845.

*Asaphus*, Brong. 1822, Crust. Foss.; Deslong. 1825, Trans. Soc. Linn. de Calvados, vol. ii. p. 298; Murch. 1836, Sil. Syst.

*Calymene*, Steininger, 1834, Mém. Géol. Soc. France, vol. i.; Buckl. 1836, Bridgewater Treatise; Murch. 1837, Sil. Syst.; Milne-Edw. 1840, Crust. iii.; Phillips, 1841, Pal. Foss.

*Pleuracanthus*, Milne-Edw. 1840, Crust. iii. p. 329.

*Trinucleus*, Münster. 1842.

*Acaste*, Goldf. 1843, Syst. Uebersicht der Trilob., Neues Jahrb. p. 563.

*Dalmania*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1.

*Trimeroccephalus*, McCoy, 1849, Ann. & Mag. Nat. Hist. vol. iv. p. 404.

*Chasmops*, McCoy, 1851, Pal. Foss. *Portlockia*, McCoy, 1851, ib. *Odontochile*, McCoy, 1851, ib.

*Phacops*, Emmrich, 1845, Neues Jahrb.; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1; Sandberger, 1850; McCoy, 1851, Pal. Foss.; Murch. 1859, Siluria, 2nd edit.

Subgenera:—

1. *Trimeroccephalus*, McCoy, 1849.

4. *Chasmops*, McCoy, 1849.

2. *Phacops*, Emmrich, 1845.

5. *Odontochile*, Corda, 1847.

3. *Acaste*, Goldfuss, 1843.

6. *Cryphæus*, Green, 1837.

*Distribution.* Cambrian, Silurian, and Devonian.

**Phacops (Acaste) alifrons**, Salter, 1852. Caradoc Rocks, N. Wales; Capel Garmon, near Llanrwst; also in Montgomeryshire.

*Phacops alifrons*, Salter, 1852, in Appendix to Sedgwick's Synops. Woodw. Foss. fasc. ii. tab. 1 g. figs. 12-14; id. 1853, in Decade vii. Geol. Surv. art. 1, p. 10; id. 1864, Mon. Pal. Soc. pt. 1, p. 33, pl. i. figs. 31-34.

**Phacops (Chasmops) amphora**, Salter, 1853. Caradoc Limestone of Grug, N. of Llandeilo, Carmarthenshire.

*Phacops (Dalmania) amphora*, Salter, 1853, Decade vii. Geol. Surv. art. 1, p. 12.

*P. amphora*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 42, pl. iv. fig. 16.

**Phacops (Acaste) apiculatus**, Salter, 1852. Upper Llandeilo Flags, Treiorwerth; Caradoc Sandstone, Shropshire, N. Wales, and Westmoreland.

*Phacops apiculatus*, Salter, 1852, in Prof. Sedgwick's Synopsis Classific. Pal

Rocks, fasc. ii. Append. iii. pl. i. *g.* figs. 17–19; id. 1853, Decade vii. Mem. Geol. Surv. art. 1, p. 9; id. 1859, Siluria, 2nd edit. p. 75, foss. 13. fig. 2; id. 1864, Mon. Pal. Soc. pt. 1, p. 28, pl. i. figs. 36–38; id. 1867, Siluria, 4th edit. p. 69, foss. 14. fig. 3; id. 1873, Cat. Camb. & Sil. Foss. p. 52.  
*Portlockia apiculata*, McCoy, 1851, ib. fasc. i. p. 162.

**Phacops (Chasmops) Bailyi**, sp. n., Salter, 1864. Caradoc Slates of  
 Tramore, co. Waterford.

*Phacops (Chasmops) Bailyi*, sp. n., Salter, 1864, Mon. Pal. Soc. pt. 1, p. 44,  
 pl. vii. figs. 21–24.

**Phacops (Acaste) Brongniarti**, Portlock, 1843. Caradoc :  
 Tyrone, &c. in Ireland; Llanfyllin, &c. in N. Wales.

*Phacops Brongniarti*, Portlock, 1843, ♂ ?, Geol. Rep. pl. ii. fig. 8.

*P. Murchisoni*, ib. fig. 9.

*P. Dalmani*, ib. fig. 7.

*P. Brongniarti* and *P. Dalmani*, Salter, 1853, Decade vii. Geol. Surv. art. 1,  
 p. 10; id. 1864, Mon. Pal. Soc. pt. 1, p. 34, pl. i. figs. 20–26.

**Phacops (Odontochile) caudatus**, Brünnich, 1871. Wenlock Limestone,  
 Dudley; Lower Ludlow, Ledbury Tunnel, Ludlow Tunnel.

*Trilobus caudatus*, Brün. 1781, Kjöbenh. Sellsk. Skrifter, Nye Samml. vol. i.  
 p. 392.

*Asaphus caudatus*, Brong. 1822; Dalman, 1826; Green, 1832; Buckland, 1836;  
 Murch. 1837; and Milne-Edw. 1840.

*Phacops caudatus*, Emmrich, 1845; Goldfuss, 1843; Burm. 1846; Salter,  
 1849, Decade ii. Geol. Surv. pl. i. figs. 1–12 & 15.

*Odontochile caudatus*, McCoy, 1851, Synops. Pal. Foss. Woodw. Mus. p. 160,  
 pl. iii. figs. 4–17.

**Phacops (Odontochile) caudatus**, Salter, 1864. May-Hill Sandstone,  
 Ireland; Woolhope Limestone, Malvern and Denbighshire  
 Grits, N. Wales; Wenlock Limestone, Dudley; Upper and  
 Lower Ludlow, Ledbury Tunnel.

*Phacops (Odontochile) caudatus*, var. *a. vulgaris*, Salter, 1864, Mon. Pal. Soc.  
 pt. 1, p. 51, pl. iii. figs. 4–17.

*P. tuberculato-caudatus*, Murch. 1837, Sil. Syst. pl. vii. fig. 8 *b*; id. 1839, Siluria,  
 2nd edit. pl. xviii. fig. 1; var.  $\beta$ , Salter, 1864, Mon. Pal. Soc. pt. 1, p. 53,  
 pl. iv. fig. 1.

*P. caudatus*, Salter, var.  $\gamma$ . *nezilis*, Mon. Pal. Soc. pt. 1, p. 54, pl. iv. figs. 3–5;  
 var.  $\delta$ . *aculeatus*, ib. p. 54, pl. iii. fig. 18.

**Phacops (Odontochile) caudatus**, var. **corrugatus**, Salter, 1873.  
 Lower Wenlock Group, Littlehope.

*Odontochile caudatus*, McCoy, 1851, Synops. Pal. Foss. p. 160, pl. iii.

*Phacops (O.) caudatus*, var. *corrugatus*, Salter, 1873, Cat. Camb. & Sil. Foss.  
 p. 93.

**Phacops (Chasmops) conophthalmus**, Boeck ?, 1838. Caradoc Slates  
 of Llansaintffraid, Glyn Ceriog, N. Wales, and Acton Scott,  
 Shropshire.

*Trilobites conicophthalmus*, Boeck, 1838, Gæa Norvegica, 1, 4.

*Phacops conicophthalmus*, Emmrich, 1845, Dissert. 21.

*Calymene Odini*, Eichwald, Sil. Syst. Esthland; De Verneuil, Geol. Russia,  
 t. xxvii. fig. 8.

*Phacops sclerops*, Burmeister, 1846, Org. Trilob. 2nd edit. tab. iv. fig. 5.

*P. conophthalmus*, Burm. ib. p. 91; Angelin, 1852, Pal. Suec. t. vii. figs. 5, 6:

Salter, 1853, Decade vii. Geol. Surv. art. 1, p. 7; id. 1864, Mon. Pal. Soc. pt. 1, p. 40, pl. iv. figs. 24, 25, and pl. vii. fig. 25.

*P. felinus*, Salter (MS.), Burmeister, 1846, Org. Trilob. 2nd edit. Append. of species, p. 125.

*Chasmops Odini*, M'Coy, 1851, Synopsis Woodw. Mus. t. i. g. figs. 22, 23.

**Phacops cryptophthalmus**, Emmrich, 1845.

Upper Devonian,  
Newton Bushell.

*Phacops cryptophthalmus*, Emmrich, 1845, Leonh. und Bronn's Jahrbuch, pp. 27, 40, &c.; Sandberger, 1850, Verst. Rheinisch. Schichtensyst. t. i. fig. 6; Roemer, 1854, Palaeontographica, vol. iii. p. 14, pl. vi.; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 17, pl. i. fig. 8.

**Phacops (Acaste) Downingia**, Murch. 1837.

May-Hill Rocks,

Woolhope Limestone and Wenlock Shale, Malvern; Wenlock Limestone, Wren's Nest, Dudley, Wallsall; Upper and Lower Ludlow Rocks, Whitcliff, Shropshire; Denbighshire Grits, Llanrwst, near Conway.

*Calymene macrophthalma*, Brong. 1822, Crust. Foss. pl. i. fig. 4; Buckland, 1836, Bridgew. Tr. pl. lxiv. fig. 5.

*C. Downingia*, Murch. 1837, Sil. Syst. pl. xiv. fig. 3; Milne-Edw. 1840, Crust. iii. p. 324.

*Asaphus subcaudatus* and *A. Cawdori*, Murch. 1837, pl. vii. figs. 9, 10.

*Acasta Downingia*, Goldfuss, 1843, Syst. Uebersicht der Trilob., Neues Jahrb. 563.

*Phacops macrophthalma*, Burm. 1843, Organis. der Trilob. 139, 140; id. 1846, Ray Society, p. 92.

*Phacops Downingia*, Emmer. 1845, Neues Jahrb. p. 40, pl. i. fig. 2, translated in Taylor's Scientific Mem. 1845, vol. iv. pl. iv. fig. 2; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 336, pl. v. figs. 2-4, Decade vii. (1853) pl. i.; M'Coy, 1851, Synop. Pal. Foss. Woodw. Mus. p. 160; Murch. 1859, Siluria, 2nd edit. pl. xviii. figs. 2-5; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 24, pl. xi. figs. 17-36.

Var. *α. vulgaris*, Salter, 1846, Mon. Pal. Soc. pt. 1, p. 26, pl. ii. figs. 17-25.

Var. *β. macrops*, id. ib. p. 26, figs. 26-29.

Var. *γ. inflatus*, id. ib. p. 27, figs. 30-33.

Var. *δ. spinosus*, id. ib. p. 27, woodcut, fig. 7.

Var. *ε. constrictus*, id. ib. p. 27, pl. ii. figs. 13-16.

Var. *ζ. cuneatus*, id. ib. p. 28, woodcut, fig. 8; id. 1873, Cat. Camb. & Sil. Foss. p. 93.

**Phacops granulatus**, Münster, 1852.

Upper Devonian, Petherwin,  
Cornwall.

*Calymene*, sp., Sby. 1840, Geol. Trans. 2nd ser. vol. v. pl. 54. figs. 23, 24.

*C. granulata*, Phillips, 1841, Pal. Foss. fig. 248 only; Münster. 1842, Beitr. Heft 5, t. v. fig. 3.

*C. laevis*, id. ib. t. v. fig. 4.

*Portlockia granulata*, M'Coy, 1851, Synopsis Woodw. Foss. p. 177.

*Phacops granulata*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 16, pl. i. figs. 1-4.

**Phacops (Odontochile) imbricatus**, Angelin, 1852.

May-Hill

Sandstone (Upper Llandovery) of Nash Scar, Presteign.

*Phacops imbricatus*, Angelin, 1852, Palaeont. Suec. t. vii. fig. 5; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 48, pl. iv. fig. 10.

- Phacops (Acaste) incertus**, Deslongchamps, 1825. Lower Silurian  
Pebbles, New Red Sandstone, Budleigh-Sallerton, S. Devon.  
*Asaphus incertus*, Deslongch. 1825, Trans. Soc. Linn. de Calvados, vol. ii.  
p. 298, &c. pl. xx. fig. 5.  
*Phacops (Dalmannia) incertus*, Rouault, 1851, Bull. Soc. Géol. Fr. vol. viii.  
p. 371.  
*P. incertus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 30, pl. i. figs. 27, 28; id. 1864,  
Quart. Journ. Geol. Soc. vol. xx. p. 291, pl. xv. fig. 4.
- Phacops (Acaste) Jamesii**, Portlock, 1843. Caradoc Rocks of  
Waterford, Tyrone.  
*Phacops Jamesii*, Portlock, 1843, Rep. Geol. of Tyrone and Londond. p. 283,  
pl. iii. fig. 10; Salter, 1853, Decade vii. Geol. Surv. Art. 1, p. 10; id. 1864,  
Mon. Pal. Soc. pt. 1, p. 32, pl. i. figs. 39-41.
- Phacops (Chasmops, M'Coy?) Jukesii**, Salter, 1853. Caradoc Rocks  
of Gelligrin, near Bala, N. Wales.  
? *Phacops sclerops*, Dalman, 1826, Palæad. t. ii. fig. 1 g.  
*P. Jukesii*, Salter, 1853, Decade vii. Geol. Surv. art. 1, p. 11; id. 1864, Mon.  
Pal. Soc. pt. 1, p. 36, pl. i. figs. 29, 30.
- Phacops laciniatus**, Roemer. Devonian, Torquay, St. Keyne's,  
Cornwall, Germany, and Spain.  
*Phacops laciniatus*, Roem., Burm. pl. xxv. fig. 6; Salter & II. Woodw. 1865,  
Cat. & Chart Foss. Crust. p. 14, fig. 86.
- Phacops (Trimercephalus) lævis**, Münster, 1842. Upper Devonian,  
Knowl Hill, Newton Bushell, Mudstone Bay, Durlstone, &c.  
*Asaphus* or *Trinucleus*, Sby. 1840, Geol. Trans. 2nd ser. vol. v. pl. 57. fig. 30.  
*Calymene lævis*, Phillips, 1841, Pal. Foss. pl. lv. fig. 250.  
*Trinucleus lævis*, Münster, 1842, Beiträge, Heft 5, t. x. fig. 6.  
*Trimercephalus lævis*, M'Coy, 1849, Ann. Nat. Hist. vol. iv. p. 404; id. 1851,  
Synopsis Woodwardian Mus. Camb. p. 178; Salter, 1864, Mon. Pal. Soc.  
pt. 1, p. 16, pl. i. figs. 5-7.
- Phacops latifrons**, Bronn, 1825. Lower Devonian, Hope and Barton,  
South Devon; Middle Devonian, Newton Bushell; Upper  
Devonian, Barnstaple, &c.  
*Calymene latifrons* and *C. Schlotheimii*, Bronn, 1825, in Leonhard's Zeitschr.  
f. d. Miner. p. 317, t. ii. figs. 1-8.  
*C. Latreillii*, Steininger, 1834, Mém. Soc. Géol. France, vol. i. pl. ii.; Phillips,  
1841, Pal. Foss. fig. 249.  
*C. Schlotheimii* and *C. Brongniarti*, Stein. ib. pp. 350, 351.  
*C. tuberculata*, Murch. 1837, Sil. Syst. pl. xiv. fig. 4.  
*Portlockia latifrons*, M'Coy, 1851, Synopsis Woodw. Mus. p. 177.  
*Phacops latifrons*, Sandberger, 1850, Verstein. Rheinisch. Schichtensyst.  
Nassau, t. i. fig. 7; Roemer, 1854-55, Palæontographica, vol. iii. t. ix.  
figs. 24, 25; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 18, pl. i. figs. 9-16.
- Phacops Llanvirnensis**, Hicks, 1875. Upper Arenig, Llanvirn Quarry.  
*Phacops Llanvirnensis*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 187,  
pl. ix. figs. 3, 4.



**Phacops (Odontochile) longicaudatus**, Murch. 1837. Woolhope Limestone, Presteign; Wenlock Shale, Malvern Tunnel and Dudley, Shropshire and Monmouthshire, &c.; Wenlock Limestone, Malvern.

*Asaphus longicaudatus*, Murch. 1837, Sil. Syst. pl. xiv. figs. 11-14; Milne-Edw. 1840, Crustacés, iii. p. 308.

*Phacops longicaudatus*, Emmrich, Goldfuss, &c. 1845, 1846.

*P. mucronatus*, Burm. 1843, Org. Tril. t. iv. fig. 9.

*P. caudatus*, *β. longicaudatus*, Salter, Decade ii. Geol. Surv. pl. i. figs. 13, 14.

*P. (Odontochile) longicaudatus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 55, pl. iii. figs. 19-28; id. 1873, Cat. Camb. & Sil. Foss. p. 132.

**Phacops (Odontochile) longicaudatus**, var. *α. armiger*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 56, pl. ii. figs. 19-21.

**P. longicaudatus**, var. *β. Grindrodianus*, id. ib. p. 57, pl. iii. figs. 2-28.

**Phacops (Chasmops) macrura**, Angelin, 1852. Caradoc Sandstones, Shropshire.

*Asaphus Powisii*, Murch. 1837, Sil. Syst. pl. xxiii. fig. 9.

*Dalmanina affinis*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, pl. v. fig. 5.

*Phacops truncato-caudatus*, var. *β. affinis*, Salter, 1849, Decade ii. Geol. Surv. art. 1, p. 7.

*Odontochile truncato-caudatus*, M'Coy, 1851, Synops. Foss. Woodw. Mus. t. i. G. fig. 20 (21?).

*Phacops macrura*, Angelin, 1852, Palæont. Suecica, t. vii. figs. 3, 4; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 37, pl. iv. figs. 18-23.

**Phacops (Acaste) mimus**, Salter, 1864. Llandeilo Flags, Great Peraver, Cornwall.

*Phacops (Acaste) mimus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 29, pl. i. fig. 35.

**Phacops (Odontochile) mucronatus**, Brong. ?, 1822. Caradoc Slates, Pen-y-Rhiw, west of Bala.

*Asaphus mucronatus*, Brong. 1822, Crust. p. 24, t. iii. fig. 9; Dalman, 1826, Palæad. p. 236, t. ii. fig. 3 a, b.

*Phacops mucronatus*, Angelin, 1852, Palæont. Suecica, tab. vii. figs. 1, 2; Salter, 1853, Decade vii. Geol. Surv. art. 1, p. 12; id. 1864, Mon. Pal. Soc. pt. 1, p. 46, pl. iv. figs. 11, 12.

**Phacops Musheni**, Salter, 1864. Wenlock Shale and Limestone, Malvern and Dudley.

*Phacops Musheni*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 23, pl. ii. figs. 7-12.

**Phacops Nicholsoni**, Salter, 1866. Lower Silurian, Whiteside, Keswick.

*Phacops Nicholsoni*, Salter, 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 486, woodcut, figs. c, d.

**Phacops nudus**, Salter, 1864. Wenlock or May-Hill Group, Cahireonree Mountain, Dingle.

*Phacops nudus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 22, pl. vi. figs. 19, 20.

**Phacops (Odontochile) obtusicaudatus**, Salter (1855). Caradoc Slate,  
Coldwell, Westmoreland.

*Phacops obtusicaudatus*, Salter, 1855, in Sedgw. & M'Coy's Synops. Foss. of the Woodw. Mus. pl. i. G. figs. 15, 16; id. Mem. Geol. Surv. Decade ii. pl. i.; id. 1864, Mon. Pal. Soc. pt. 1, p. 45, pl. i. figs. 42-45.

**Phacops (Cryphæus) punctatus**, Steiningor?, 1833. M. & L. Devonian,  
Torquay, South Devon; Slates of Liskeard, Cornwall.

*Olenus punctatus*, Steiningor, 1833, Mém. de la Soc. Géol. Fr. i. p. 356, pl. xxii.; Emmrich, 1839, Dissertation, p. 55.

*Asaphus arachnoides*, Goldfuss, 1843, Leonhard u. Bronn's Neues Jahrbuch, p. 561, tab. v. fig. 3.

*Pleuracanthus arachnoides*, Milne-Edw. 1840, Crust. iii. p. 329.

*Phacops arachnoides*, Burmeister, 1843, Org. Trilob. 1st edit.; 1846, 2nd edit. p. 96.

*P. punctatus*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 59, pl. i. figs. 17-19.

**Phacops Stokesii**, Milne-Edw. 1840. Llandovery Rocks, Mullock,  
Girvan, Galway, &c.; May-Hill Sandstone, Wenlock  
Limest., Dudley &c.; Ludlow Rocks, Shropshire &c.

*Asaphus macrophthalmus*, Brong. 1822, Crust. Foss. pl. i. fig. 5.

*Calymene macrophthalma*, Buckl. 1836, Bridgew. Treatise, pl. lxiv. fig. 4; Murch. 1839, Sil. Syst. t. xiv. fig. 2.

*C. Stokesii*, Milne-Edw. 1840, Crust. iii. 324.

*Portlockia sublaevis*, M'Coy, 1846, Sil. Foss. Ireland, pl. iv. fig. 13.

*Phacops Stokesii*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 335, pl. v. fig. 1; id. 1850, Quart. Journ. Geol. Soc. vol. vii. pl. ix. fig. 2; id. 1859, Siluria, 2nd edit. pl. xviii. fig. 6; id. 1864, Mon. Pal. Soc. pt. 1, p. 21, pl. ii. figs. 1-6; Murch. 1867, Siluria, p. 520, pl. x. fig. 6, pl. xviii. fig. 6; Salter, 1873, Cat. Camb. & Sil. Foss. pp. 76, 86, 93, 131, 166.

*Portlockii Stokesii*, M'Coy, 1851, Synopsis Woodw. Mus. p. 163.

**Phacops (Chasmops) subduplicata**, Salter, 1866. Llandovery Rocks,  
Haverfordwest, Pembrokeshire.

*Ogygia?* (vel *Phacops*) *subduplicata*, Salter, 1866, Mon. Pal. Soc. pt. 3, p. 130, pl. xv. figs. 7, 8.

*Phacops (Chasmops) subduplicata*, Salter, 1867, Siluria, p. 520.

**Phacops (Chasmops) truncato-caudatus**, Portlock, 1843. Caradoc,  
Desertcreat &c., Tyrone.

*Phacops truncato-caudatus*, Portlock, 1843, Rep. Geol. Tyrone, pl. ii. figs. 1-4; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 42, pl. iv. figs. 13-15.

**Phacops Weaveri**, Salter, 1855. May-Hill Sandstone, Long's  
Quarry, Damory Bridge, Charfield, Woodford Green,  
Tortworth, and Marloc's Bay, Pembrokeshire.

*Phacops Weaveri*, Salter, 1855, Decade ii. Geol. Surv. art. 1, p. 7, pl. i. fig. 16; id. 1864, Mon. Pal. Soc. pt. 1, p. 57, pl. iii. figs. 1-3, pl. iv. figs. 6-9.

### PHILLIPSIA, Portlock, 1843.

*Entomolithus*, Martin, 1809, Petrificata Derbiensia.

*Asaphus*, Phil. 1836, Geol. Yorks. vol. ii. p. 239.

*Phillipsia*, Portl. 1843, Geol. Report, p. 305; M'Coy, 1844, Carb. Foss. p. 163; Morris, 1854, Cat. 114; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 16.

*Distribution.* Carboniferous.

***Phillipsia Brongniartii*, Fischer, sp., 1825.** Carb. Limestone, Bolland, Kildare, Belgium, Russia.

*Asaphus obsoletus*, Phil. 1836, Geol. Yorks. vol. ii. p. 239, t. xxii. fig. 35.

*A. granuliferus*, Phil. 1836, l. c. fig. 7; id. 1836, Pal. Foss. p. 139, pl. xxix. fig. 251.

*Phillipsia Brongniartii*, De Kon. 1842, An. Foss. t. liii. fig. 7; Morris, 1854, Cat. p. 114; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 16, fig. 113.

***Phillipsia cælata*, M'Coy, 1844.** Carb. Limestone, Ireland.

*Phillipsia cælata*, M'Coy, 1844, Carb. Foss. t. iv. fig. 4; Morris, Cat. 1854, 3rd edit. p. 114.

***Phillipsia Colei*, M'Coy, 1844.** Carb. Limestone, Ireland.

*Phillipsia Colei*, M'Coy, 1844, Carb. Foss. t. iv. fig. 6; Morris, Cat. 1854, 3rd edit. p. 114.

***Phillipsia derbiensis*, Mart. sp., 1809.** Carb. Limestone, Derbyshire, Kendal, Kildare, Ireland, and Belgium.

*Entomolithus derbiensis*, Mart. 1809, Pet. Derb. t. xlv. \* figs. 1, 2.

*Phillipsia derbiensis*, De Kon. 1842, An. Foss. t. liii. fig. 2; Morris, 1854, Cat. Brit. Foss. p. 114; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 16, fig. 111.

*Asaphus raniceps*, Phil. 1836, Geol. Yorks. vol. ii. t. xxii. figs. 14, 15.

*Phillipsia Jonesii*, var. *seminiferus*, Portlock, 1843, Geol. Rep. p. 308, t. xi. fig. 5; M'Coy, 1855, Brit. Pal. Foss. p. 183.

***Phillipsia pustulata*, Schloth. sp., 1823.** Carb. Limestone, Bolland, Derbyshire, Wexford, Ireland, and Belgium.

*Asaphus gemmudiferus*, Phil. 1836, Geol. Yorks. vol. ii. pl. xxii. fig. 11.

*Phillipsia Kellii* et *ornata*, Portlock, 1836, Rep. Geol. t. xi. figs. 1, 2.

*P. quadriserialis*, M'Coy, 1844, Carb. Foss. Ireland, pl. iv. fig. 8.

*P. pustulata*, Morris, 1854, Cat. p. 114; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 15, fig. 107.

***Phillipsia seminifera*, Phil. sp., 1836.** Carb. Limestone, Longnor, Ashford, Derbyshire.

*Asaphus seminifera*, Phil. 1836, Geol. Yorks. vol. ii. pl. xxii. figs. 8, 9, 10.

*Phillipsia gemmudifera*, De Kon. 1842, An. Foss. pl. liii. fig. 3 (not Phil.): M'Coy, 1844, Carb. Foss. p. 162.

*P. seminifera*, H. Woodw. & Salter, 1865, Cat. & Chart. Foss. Crust. p. 15, fig. 110.

***Phillipsia truncatula*, Phil. sp., 1836.** Carb. Limestone, Florence Court, and Hook, County Wexford.

*Asaphus truncatulus*, Phil. 1836, Geol. Yorks. vol. ii. pl. xxii. figs. 12, 13.

*Phillipsia ornata*, Portlock, 1843, Geol. Rep. p. 307, pl. xi. figs. 2a, 2b.

*P. truncatula*, M'Coy, 1844, Carb. Foss. p. 163.

**Phillipsia quadrilimba**, Phil. sp., 1836. Carb. Limestone, Bollaund, Ireland.

*Asaphus quadrilimbus*, Phil. 1836, Geol. Yorks. vol. ii. p. 239, pl. xxii. figs. 1, 2.

### PLACOPARIA, Corda, 1847.

*Placoparia*, Corda, 1847, Mon. der Böhm. Tril. p. 128; Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 187.

*Distribution.* Lower Silurian.

**Placoparia Cambriensis**, Hicks, 1875. Upper Arenig, Llanvirn Quarry (near Aber-eiddy).

*Placoparia Cambriensis*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 187, pl. ix. figs. 1, 2.

### PLUTONIA, Hicks, 1865.

*Plutonia*, Hicks, 1868, Brit. Assoc. Rep.; Salter, 1873, Cat. Camb. & Sil. Foss. p. 2.

*Distribution.* Lower Cambrian.

**Plutonia Sedgwickii**, Hicks, 1871. Longmynd Rocks, Nun's Well, St. David's.

*Plutonia Sedgwickii*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 399, pl. xv. figs. 1-8.

### PROETUS, Steininger, 1830.

*Asaphus*, Murch. 1839, Sil. Syst.

*Proetus*, Murch. 1854, Siluria; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 337.

*Forbesia*, M'Coy, 1855, Pal. Foss. p. 174.

*Distribution.* Upper Cambrian and Silurian.

**Proetus Fletcheri**, Salter, 1873. Wenlock Limestone, Dudley.

*Proetus Fletcheri*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 134.

**Proetus latifrons**, M'Coy, sp., 1846. Upper Silurian, Usk, Monmouthshire.

*Forbesia latifrons*, M'Coy, 1846, Sil. Foss. Ireland, pl. iv. fig. 11; M'Coy, 1855, Pal. Foss. p. 174.

*Proetus latifrons*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 337, pl. vi. fig. 1; Salter, 1873, Cat. Camb. & Sil. Foss. pp. 134 & 165.

**Proetus Stokesii**, Murch. 1839. Wenlock Limestone, Dudley, Ledbury, Herefordshire.

*Asaphus Stokesii*, Murch. 1839, Sil. Syst. t. xiv. fig. 6.

*Proetus Stokesii*, Murch. 1854, Siluria, pl. xvii. fig. 7; Salter, 1873, Cat. Camb. & Sil. Foss. p. 134.

*Forbesia Stokesii*, M'Coy, 1855, Pal. Foss. p. 174.

**Proetus**, sp., Salter, 1873. Upper Cambrian, Helms-Knot, Dent.

*Proetus*, sp., Salter, 1873, Cat. Camb. & Sil. Foss. p. 78.

**Proetus**, sp., Salter, 1873.

Silurian, Braes E. of Girvan ; Wenlock,  
Tortworth, Dudley, and Ledbury.

*Proetus*, sp., Salter, 1873, Cat. Camb. & Sil. Foss. pp. 86 & 133.

### **PSILOCEPHALUS**, Salter, 1866.

*Psilocephalus*, Salter, 1866, Mon. Pal. Soc. p. 175.

*Distribution.* Silurian.

**Psilocephalus inflatus**, Salter, 1866.

Lower Tremadoc, N.W. of

Penmorfa : Upper Beds, Trwyn Cae Iago, Portmadoc Harbour.

*Psilocephalus inflatus*, Salter, 1866, App. Ramsay, Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 316, woodcut, fig. 8 ; Salter, 1866, Mon. Pal. Soc. pt. 3, p. 175, woodcut 41.

**Psilocephalus innotatus**, Salter, 1866.

Lower Tremadoc beds of  
Penmorfa.

*Psilocephalus innotatus*, Salter, 1866, App. Ramsay, Geol. N. Wales, Mem. Geol. Surv. vol. iii. p. 315, pl. vi. figs. 9-12 ; Salter, 1866, Mon. Pal. Soc. pt. 3, p. xx. figs. 13-19.

### **REMOPLEURIDES**, Portlock, 1843.

*Remopleurides*, Portlock, 1843, Rep. Geol. Tyrone, p. 154 ; Emmrich, 1845, Neues Jahrb. p. 45 ; McCoy, 1846, Synops. Sil. Foss. Ireland, p. 43 ; Salter, 1853, Geol. Surv. Decade vii. : Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12 ; Etheridge, Morris, and Jones, 1867, App. Murch. Sil. p. 521.

*Amphitryon*, Corda, 1847, Prodr. böhm. Tril.

*Caphyra*, Barrande, 1853, Syst. Sil. Bohême.

*Distribution.* Upper Cambrian and Lower Silurian.

**Remopleurides Colbii**, Portlock, 1843.

Lower Silurian, Desertcreat,  
Tyrone ; Bala Limestone, N. Wales.

*Remopleurides Colbii*, Portlock, 1843, Rep. Geol. Tyrone, p. 256, pl. i. fig. 1 ; Salter, 1853, Geol. Surv. Decade vii. pl. viii. fig. 1 ; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12, fig. 40 ; Etheridge, Morris, and Jones, 1867, Appen. Murch. Siluria, p. 521.

*N. Colbii*, Emmrich, 1845, Neues Jahrb. p. 45 ; McCoy, 1846, Syn. Sil. Foss. Ireland, p. 43.

**Remopleurides dorsospinifer**, Portlock, 1843.

Lower Silurian,  
Desertcreat, Tyrone, Tramore, Waterford.

*Remopleurides dorsospinifer*, Portlock, 1843, Rep. Geol. Tyrone, p. 256, pl. i. figs. 3 & 4 ; McCoy, 1846, Syn. Sil. Foss. Ireland, p. 43 ; Salter, 1853, Geol. Surv. Decade vii. pl. viii. figs. 3, 4 ; Etheridge, Morris, and Jones, 1867, Appen. Murch. Sil. p. 521, & (p. 206) foss. 48, fig. 5.

**Remopleurides laterispinifer**, Portlock, 1843.

Lower Silurian,  
Townland of Bardahassagh, Tyrone.

*Remopleurides laterispinifer*, Portlock, 1843, Rep. Geol. Tyrone, p. 256, pl. i. fig. 2 ; McCoy, 1846, Syn. Sil. Foss. Ireland, p. 43 ; Salter, 1853, Geol. Surv. Decade vii. pl. viii. fig. 2 ; Etheridge, Morris, and Jones, 1867, Appen. Murch. Sil. p. 521.

**Remopleurides longicostatus**, Portlock, 1843. Caradoc, Bala,  
Tyrone, Waterford, and Kildare.

*Remopleurides longicostatus*, Portlock, 1843, Geol. Rep. Tyrone, p. 257, pl. i. fig. 6; Salter, 1853, Geol. Surv. Decade vii.; Etheridge, Morris, and Jones, 1867, Appen. Murch. Sil. p. 521.

*R. longicapitatus*, Portlock, 1843, Rep. Geol. Tyrone, p. 257, pl. i. fig. 6.

**Remopleurides obtusus**, Salter, 1853. Lower Silurian, Desertcreat,  
Tyrone.

*Remopleurides obtusus*, Salter, 1853, Geol. Surv. Decade vii.; Etheridge, Morris, and Jones, 1867, Appen. Murch. Sil. p. 521.

**Remopleurides platyceps**, M'Coy, 1846. Lower Silurian, Enniscorthy,  
Wexford.

*Remopleurides platyceps*, M'Coy, 1846, Synop. Sil. Foss. Ireland, p. 44; Salter, 1853, Geol. Surv. Decade vii. p. 9; Etheridge, Morris, and Jones, 1867, Appen. Murch. Sil. p. 521.

**Remopleurides radians**, Barrande, 1846. Lower Silurian, Rhiwlas; Bala.

*Amphitryon Murchisoni*, Corda, 1847, Prodr. böhm. Tril. t. vi. fig. 58.

*Caphyra radians*, Barrande, 1853, Syst. Sil. Bohême, pl. xliii. figs. 33-39.

*Remopleurides radians*, Salter, 1853, Geol. Surv. Decade vii.; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 12, fig. 41; Etheridge, Morris, and Jones, 1867, Appen. Murch. Sil. p. 521.

### SPHÆREXOCHUS, Beyrich, 1845.

*Calymene*, Hisinger, 1840, Leth. Suec. 2nd Supp.

*Sphærexochus*, Beyrich, 1845, Ueber einige böhm. Tril. p. 21; M'Coy, 1846, Syn. Sil. Foss. Ireland; Corda, 1847, Prodom einer Mon. böhm. Tril.; Salter, 1853, Decade vii. Geol. Surv.

*Distribution.* Cambrian & Silurian.

**Sphærexochus Boops**, Salter, 1864. Caradoc Slate, Haverfordwest  
and Appledram, Westmoreland.

*Ceraurus clavifrons*, M'Coy, 1851, Synopsis Pal. Foss. Woodw. Mus. pl. i. F. fig. 12.

*Sphærexochus boops*, Salter, 1864, Mon. Pal. Soc. pt. 1, p. 79, pl. vi. figs. 27, 28; id. 1873, Cat. Camb. & Sil. Foss. p. 50 & woodcut.

**Sphærexochus juvenis**, Salter, 1848. Llandeilo Flags, N. and S. Wales,  
Haverfordwest, Sholes Hook.

*Cheirurus globosus*, Barrande, 1846, Supp. p. 5.

*Sphærexochus juvenis*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 344, pl. vii. figs. 1, 2, 3.

**Sphærexochus mirus**, Beyrich, 1845. Caradoc Rocks, Ireland;  
Woolhope Limestone, Malvern; Wenlock Shale,  
Dudley and Malvern.

*Calymene clavifrons*, Hisinger, 1840, Leth. Suec. 2nd Supp. t. xxxvii. fig. 1.

*Sphærexochus mirus*, Beyrich, 1845, Ueber einige böhm. Tril. p. 21; Corda, 1847, Prodom einer Mon. böhm. Tril. fig. 72; Barrande, 1853, Syst. Sil. de Bohême, vol. i. pl. lxiii. figs. 11, 18; Salter, 1853, Geol. Surv. Decade vii. pl. iii.; Salter, 1864, Mon. Pal. Soc. pt. 1, p. 76, pl. vii. figs. 1-6; Salter, 1873, Cat. Camb. & Sil. Foss. p. 131.

*S. calvus*, M'Coy, 1846, Syn. Sil. Foss. Ireland, pl. iv. fig. 10.

**STAUROCEPHALUS**, Barrande, 1846.

*Staurocephalus*, Barrande, 1846, *Prodrom Syst. Sil. Bohême*, p. 53; McCoy, 1855, *Synopsis Woodw. Mus.*; Salter, 1864, *Geol. Surv. Decade xi.*

*Distribution.* Cambrian & Silurian.

**Staurocephalus globiceps**, Portlock, 1843.

Caradoc, Tyrone and Ayrshire.

*Ceraurus globiceps*, Portlock, 1843, *Rep. Geol. Tyrone*, p. 257, tab. i. fig. 7.

*Staurocephalus globiceps*, Salter, 1865, *Geol. Surv. Decade xi. pl. v. fig. 6*; Salter, 1865, *Mon. Pal. Soc. pt. 2, p. 85, pl. vii. fig. 21.*

**Staurocephalus Murchisoni**, Barrande, 1846.

Caradoc, N. Wales; Woolhope and Wenlock Limestone, Presteign, Dudley, and Malvern.

*Staurocephalus Murchisoni*, Barrande, 1846, *Prodrom Syst. Sil. Bohême*, p. 53; Barrande, 1852, *Syst. Sil. Bohême*, pl. xliii. figs. 28-32; McCoy, 1855, *Synopsis Woodw. Mus. pl. i. F. fig. 15*; Salter, 1859, *Siluria*, 3rd edit. p. 540; Salter, 1865, *Geol. Surv. Decade xi. pl. v. figs. 1-5*; Salter, 1865, *Mon. Pal. Soc. pt. 2, p. 84, pl. vii. figs. 13-20*; Salter, 1873, *Cat. Camb. & Sil. Foss. p. 50 & figures & p. 131.*

**Staurocephalus ? unicus**, Wyv. Thomson, 1857.

Caradoc, Ayrshire.

*Acidaspis unica*, Thomson, 1857, *Quart. Journ. Geol. Soc. vol. xiii. pl. vi. fig. 13.*

*Staurocephalus ? unica*, Salter, 1865, *Geol. Surv. Decade xi. art. 5*; Salter, 1865, *Mon. Pal. Soc. pt. 2, p. 86, pl. vii. figs. 22-24.*

**Staurocephalus**, sp., Salter, 1865, *Mon. Pal. Soc. pt. 2, p. 87, pl. vii. fig. 25.***STYGINA**, Salter, 1853.

*Ogygia*, Murch. 1837, *Sil. Syst.*

*Asaphus*, Portlock, 1843, *Rep. Geol. Londond. & Tyrone.*

*Stygina*, Salter, 1853, *Rep. Brit. Assoc., Trans. Sect. p. 59.*

*Distribution.* Silurian.

**Stygina latifrons**, Portlock, 1843.

Caradoc, Desertcreat, Tyrone.

*Asaphus latifrons*, Portlock, 1843, *Rep. Geol. Londond. & Tyrone*, pl. vii. figs. 5, 6.

*A. marginatus*, Portlock, 1843, *Rep. Geol. Londond. & Tyrone*, pl. vii. fig. 7.

*Stygina latifrons*, Salter, 1853, *Rep. Brit. Assoc. Trans. Sect. p. 59*; Salter, 1859, *Siluria*, 3rd edit. p. 184 (foss. 26. fig. 2); Salter, 1864, *Geol. Surv. Decade xi. sec. 2, p. 1, pl. xi.*; Salter, 1866, *Mon. Pal. Soc. pt. 3, p. 172, pl. xviii. figs. 7-10.*

**Stygina Murchisoniæ**, Murch. 1837.

Caradoc, Mount Pleasant, Carmarthen.

*Ogygia Murchisoniæ*, Murch. 1837, *Sil. Syst. pl. xxv. fig. 3.*

*Stygina Murchisoniæ*, Salter, 1853, *Report Brit. Assoc. Trans. Sect. p. 59*; Salter, 1859, *Siluria*, 3rd edit. p. 55 (foss. 10. fig. 4); Salter, 1864, *Geol. Surv. Decade xi. sec. 2, p. 3, pl. iv. fig. 1*; Salter, 1866, *Mon. Pal. Soc. pt. 3, p. 173, pl. xviii. fig. 11.*

**Stygina ? Musheni**, Salter, 1866.

Caradoc, Buildwas.

*Stygina ? Musheni*, Salter, 1866, *Mon. Pal. Soc. pt. 3, p. 174, pl. xix. fig. 1.*

*Stygina*, sp., Salter, 1866. Caradoc, Sholes Hole, Haverfordwest.

*Stygina*, sp., 1866, Salter, Mon. Pal. Soc. pt. 3, woodcut 40, p. 174.

### TRINUCLEUS, Lhwyd, 1693.

*Nuttainia*, Eaton, 1832, Geol. Text-book.

*Trinucleus*, Portlock, 1834, Rep. Geol. Tyrone: Murch. 1839, Sil. Syst.;

Milne-Edw. 1840, Crust. vol. iii. p. 331; McCoy, 1851, Pal. Foss. Woodw.

Mus.; Salter, 1853, Geol. Surv. Decade vii.; Hicks, 1876, Quart. Journ.

Geol. Soc. vol. xxxii. p. 135.

*Tretaspis*, McCoy, 1851, Pal. Foss. Woodw. Mus.

*Distribution.* Upper Cambrian and Lower Silurian.

*Trinucleus concentricus*, Eaton, sp., 1832. Upper Llandovery,  
Shropshire; Caradoc, Britain.

*Nuttainia concentrica*, Eaton, 1832, Geol. Text-book, pl. i. fig. 2; Salter, 1866,

Mem. Geol. Surv. vol. iii. p. 320, pl. xix. fig. 4; Salter, 1873, Cat. Camb. &

Sil. Foss. p. 49.

*N. Caractaci*, Murch. 1839, Sil. Syst. pl. xxiii. fig. 1.

*Trinucleus concentricus*, var. *a. Goldfussii*, Barrande, 1853. Llandeilo,  
Caradoc and Bala Rocks, N. & S. Wales and Ireland.

*Trinucleus Sternbergii*, Salter, 1847, Quart. Journ. Geol. Soc. vol. iii. p. 253.

*T. Goldfussii*, Salter, 1853, Geol. Surv. Decade vii.

*Trinucleus concentricus*, var. *β. Caractaci*, Murch. 1839. Bala Rocks,  
Welshpool and N. Wales.

*Trinucleus concentricus*, var. *β. Caractaci*, Murch. 1839, Sil. Syst. pl. v. fig. 1;

Salter, 1853, Geol. Surv. Decade vii.

*Trinucleus concentricus*, var. *γ. elongatus*, Portlock, 1834. Llandeilo  
Flags, Pembrokeshire.

*Trinucleus concentricus*, var. *γ. elongatus*, Portlock, 1834, Rep. Geol. Londond.

& Tyrone, pl. i. B. fig. 7; Salter, 1853, Geol. Surv. Decade vii.

*Trinucleus concentricus*, var. *ε. Portlockii*, Salter, 1853. Caradoc,  
Tyrone, Desertcreat.

*Trinucleus Caractaci*, Portlock, 1834, Rep. Geol. Londond. & Tyrone, pl. i. B.

*T. latus*, Portlock, 1834, Rep. Geol. Londond. & Tyrone, pl. i. B.

*T. concentricus*, var. *ε. Portlockii*, Salter, 1853, Geol. Surv. Decade vii.

*Trinucleus Etheridgi*, Hicks, 1875. Upper Arenig, Llanvirn Quarry.

*Trinucleus Etheridgi*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 82,

pl. ix. fig. 6.

*Trinucleus favus*, Salter, 1866. Upper Llandeilo, N. and S. Wales.

*Trinucleus gibbifrons* & *T. Caractaci*, McCoy, 1851, Pal. Foss. Woodw. Mus.

(in part) pp. 144, 145.

*T. concentricus*, var. *δ. farus*, Salter, Mem. Geol. Surv. vol. ii. pt. 1, pl. ix.

fig. 3, & Decade vii. pl. vii.

*T. farus*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 320, pl. xiii. fig. 9; Salter,

1873, Cat. Camb. & Sil. Foss. p. 31.



**Trinucleus fimbriatus**, Murch. sp., 1839. Llandeilo, Builth, Radnorshire.

*Trinucleus fimbriatus*, Murch. 1839, Sil. Syst. pl. xxiii. fig. 2.

*T. (Tretaspis) fimbriatus*, Salter, 1863, Geol. Surv. Decade vii.; Salter, 1873, Cat. Camb. & Sil. Foss. p. 32.

*Tretaspis fimbriatus*, McCoy, Pal. Foss. Woodw. Mus. p. 146, pl. i. E. fig. 16.

**Trinucleus Gibbsii**, Salter, 1854. Lower Llandeilo, St. David's Head.

*Trinucleus Gibbsii*, Salter, Siluria, 2nd edit. p. 53, foss. 9, fig. 7; Salter, 1866, Decades Geol. Surv. vol. iii. p. 319, pl. xii. fig. 10; Salter, 1873, Cat. Camb. & Sil. Foss. p. 22.

**Trinucleus Lloydii**, Murchison, 1839. Llandeilo Flags, Carmarthenshire, Llandeilo, Llangadoch, and Shropshire.

*Trinucleus Lloydii*, Murch. 1839, Sil. Syst. pl. xxiii. fig. 4; Milne-Edw. 1840, Crust. vol. iii. p. 331; Salter, 1853, Geol. Surv. Decade vii. pl. vii. figs. 1, 3, 4, 5, & 7.

*T. granulatus*, Salter, 1847, Quart. Journ. Geol. Soc. vol. iii. p. 254; Phillips & Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1. p. 246.

**Trinucleus Lloydii**, var.  $\beta$ . *Corndensis*, Salter, 1853, Geol. Surv. Decade vii. pl. vii. figs. 2 & 6.

**Trinucleus Murchisoni**, Salter, 1854. Lower Llandeilo, Cefn Gwynlle, near Shelve.

*Trinucleus Murchisoni*, Salter, 1854, Siluria, 3rd edit. p. 50, foss. 8, fig. 7; Salter, 1866, Mem. Geol. Surv. vol. iii. p. 319, pl. 116, fig. 4.

**Trinucleus ornatus**, Sternberg, 1833. Llandeilo, S. Wales.

*Trinucleus ornatus*, Sternb. 1833, Verhandl. Ges. Mus. Böh. fig. 2 a; Salter, 1847, Quart. Journ. Geol. Soc. vol. iii. p. 253; Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 349, pl. ix. figs. 1, 2.

*Nuttainia concentrica*, Eaton, Geol. Text-book, pl. i. fig. 2.

**Trinucleus radiatus**, Murch. 1839. Caradoc S., Trilobite Dingle, Welshpool.

*Trinucleus radiatus*, Murch. 1839, Sil. Syst. pl. xxiv. fig. 3.

*T. (Tretaspis) radiatus*, Salter, 1853, Geol. Surv. Decade vii.

**Trinucleus Ramsayi**, Hicks, 1875. Upper Arenig and Lower Llandeilo, Porthayog in Ramsey Island, and Aber-eiddy Bay.

*Trinucleus Ramsayi*, Hicks, 1875, Quart. Journ. Geol. Soc. vol. xxxi. p. 183, pl. x. figs. 1, 2.

**Trinucleus Sedgwicki**, Salter, 1866. Lower Llandeilo, St. David's Head, and near Ffestiniog.

*Trinucleus Sedgwicki*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 319, pl. xii. fig. 9.

**Trinucleus seticornis**, Hisinger, sp., 1840. Lower Silurian, Tyrone, Kildare, Wexford; Bala, Llanfyllin, Haverfordwest, &c.

*Asaphus seticornis*, Hisinger, 1840, Leth. Suec. pl. xxxvii. fig. 2.

*Trinucleus seticornis*, Portlock, Rep. Geol. Londond. & Tyrone, pl. i. B. fig. 8.

*Tretaspis seticornis*, McCoy, 1851, Pal. Foss. Woodw. Mus. p. 147.

*Trinucleus (Tretaspis) seticornis*, Salter, 1853, Geol. Surv. Decade vii.; Salter, 1873, Cat. Camb. & Sil. Foss. p. 50, & fig.

*T. radiatus*, Portlock, Rep. Geol. Londond. & Tyrone, pl. i. B. fig. 9.

**Trinucleus Thersites**, Salter, 1853. Lower Silurian, Tramore, Waterford.

*Trinucleus Thersites*, Salter, 1853, Geol. Surv. Decade vii.

**Trinucleus**, sp., Hicks, 1876.

Arenig, Cambrian Shales,  
near Caernarvon.

*Trinucleus*, sp., Hicks, 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 135.

## Order V. AMPHIPODA.

### PROSOPONISCUS, Kirkby, 1857.

*Trilobites*, Schloth. 1820, Petrefact. p. 41.

*Prosoponiscus*, Kirkby, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 214;

Spence Bate, 1859, ib. vol. xv. p. 137.

*Distribution.* Permian.

**Prosoponiscus problematicus**, Schloth. sp., 1820. Magnesian Limestone, Durham.

*Trilobites problematicus*, Schloth. 1820, Petrefact. p. 41.

*Prosoponiscus problematicus*, Kirkby, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. 214, pl. vii. figs. 1-7; Spence Bate, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 137, pl. vi. figs. 1-7.

## Order VI. XIPHOSURA.

### BELLINURUS, König, 1820.

*Bellinurus*, König, 1820, Icones Foss. Sect. pl. xviii.; Baily, 1863, Ann. & Mag. Nat. Hist. 3rd ser. vol. xi. p. 112; H. Woodward, 1872, Geol. Mag. vol. ix. p. 439.

*Entomolithus*, Martin, 1809, Pet. Derb.; Parkinson, 1811, Org. Rem. vol. iii.

*Limulus*, Buckland, 1836, Bridgew. Treat. vol. i. p. 396, vol. ii. p. 77; Prestwich, 1840, Geol. Trans. 2nd ser. vol. v.; Portlock, 1843, Rep. Geol. Londonderry, p. 316.

*Bellinurus*?, M'Coy, 1855, Pal. Foss. Woodw. Mus.

*Distribution.* Coal Measures.

**Bellinurus arcuatus**, Baily, 1863.

Coal Measures, Queen's County,  
Ireland.

*Bellinurus arcuatus*, Baily, 1863, Ann. & Mag. Nat. Hist. 3rd ser. vol. xi. pl. v. figs. 2 A-C (sine descrip.).

**Bellinurus bellulus**, König, 1820.

Coal Measures, Coalbrookdale,  
Shropshire; near Mansfield, Nottingham; Dudley, Shropshire.

*Bellinurus bellulus*, König, 1820, Icones Foss. Sect. pl. xviii. fig. 230; Baily, 1863, Ann. & Mag. Nat. Hist. 3rd ser. vol. xi. p. 112; H. Woodw. 1872, Geol. Mag. vol. ix. p. 439.

*Entomolithus (Monoculus) lunatus*, Martin, 1809, Pet. Derb. pl. xlv. fig. 4; Parkinson, 1811, Org. Rem. vol. iii. pl. xvii. fig. 18.

*Limulus trilobitoides*, Buckland, 1836, Bridgew. Treat. pl. 46". fig. 3; Prestwich, 1840, Geol. Trans. 2nd ser. vol. v. pl. xli. fig. 8.

*L. trilobitoides*?, Portlock, 1843, Report Geol. Londonderry, pl. xxiv. fig. 11.

**Bellinurus Königianus**, H. Woodw. 1872. Coal Measures, Dudley.

*Bellinurus Königianus*, H. Woodw. 1872, Geol. Mag. vol. ix. pl. x. fig. 8, p. 439.

**Bellinurus reginæ**, Baily, 1863. Coal Measures. Queen's County, Ireland.

*Bellinurus reginæ*, Baily, 1863, Ann. & Mag. Nat. Hist. 3rd ser. vol. xi. p. 107, pl. v. figs. 1 A-D; Quart. Journ. Geol. Soc. 1867, vol. xxiii. pl. i. fig. 1.

(*Bellinurus*??) \*, sp., McCoy, 1855. Lower Silurian.

(*Bellinurus*??) \*, sp., McCoy, 1855, Pal. Foss. Woodw. Mus. pl. i. E. fig. 12.

### NEOLIMULUS, H. Woodw. 1868.

*Neolimulus*, H. Woodw. 1868, Geol. Mag. vol. v. p. 1.

*Distribution*. Upper Silurian.

**Neolimulus falcatus**, H. Woodw. 1868. Upper Silurian, Lesmahagow, Lanarkshire.

*Neolimulus falcatus*, H. Woodw. 1868, Geol. Mag. vol. v. p. 1, pl. i. figs. 1, 1 a.

### PRESTWICHIA, H. Woodw. 1867.

*Limulus*, Prestwich, 1840, Trans. Geol. Soc. 2nd ser. vol. v.

*Bellinurus*, Baily, 1863, Ann. & Mag. Nat. Hist. 3rd ser. vol. xi. p. 113.

*Prestwichia*, H. Woodw. 1867, Quart. Journ. Geol. Soc. vol. xxiii. p. 32.

*Distribution*. Coal Measures.

**Prestwichia anthrax**, Prestw. sp., 1840. Coal Measures: Airdrie, Dudley, Coalbrookdale, near Nottingham.

*Limulus anthrax*, Prestwich, 1840, Trans. Geol. Soc. 2nd ser. vol. v. pl. xli. figs. 1-4.

*Bellinurus anthrax*, Baily, 1863, Ann. & Mag. Nat. Hist. 3rd ser. vol. xi. p. 113.

*Prestwichia anthrax*, H. Woodw. 1867, Quart. Journ. Geol. Soc. vol. xxiii. p. 32, pl. i. fig. 2.

**Prestwichia Birtwelli**, H. Woodw. 1872. Coal Measures, Padiham, Lancashire.

*Prestwichia Birtwelli*, H. Woodw. 1872, Geol. Mag. vol. ix. pl. x. figs. 9 & 10, p. 440.

**Prestwichia rotundata**, H. Woodw. 1867. Clay Ironstone, Coal Measures, Coalbrookdale.

*Limulus rotundus*, Prestw. Trans. Geol. Soc. 2nd ser. vol. v. pl. xli. figs. 5-7.

*Prestwichia rotundata*, H. Woodw. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 240, pl. iii. fig. 8; id. 1867, Quart. Journ. Geol. Soc. vol. xxiii. pl. i. fig. 1.

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\* Perhaps a Phyllopodous head-shield.—H. W

## Order VII. EURYPTERIDA.

**EURYPTERUS**, De Kay, 1826.

*Eurypterus*, De Kay, 1826, Ann. Lyc. New York; Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 232; H. Woodw. 1868, ib. vol. xxiv. p. 290.

*Eidothea*, Scouler, 1831, Cheek's Edinb. Journ. Geogr. Sci. new ser. no. vi. p. 352.

*Himantopterus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 32.

*Pterygotus*, Baily, 1869, Brit. Assoc. Rep. p. 75.

*Distribution.* Silurian to Carboniferous.

**Eurypterus abbreviatus**, Salter, 1859.

Downton Sandstone,  
Kington, Hereford.

*Eurypterus abbreviatus*, Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 234, pl. x. fig. 18; H. Woodw. 1872, Mon. Pal. Soc., Merostomata, p. 148, pl. xxviii. fig. 14.

**Eurypterus acuminatus**, Salter, 1859.

Passage-Shales between the  
Upper Ludlow Rock and the Old Red Sandstone, near Ludlow.

*Eurypterus acuminatus*, Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 233, pl. x. fig. 17 (and fig. 19?); H. Woodw. 1872, Mon. Pal. Soc., Merostomata, p. 146, pl. xxviii. figs. 13 and 15.

**Eurypterus Brewsteri**, H. Woodw. 1864.

Old Red Sandstone,  
Kelly Den, Arbroath.

*Eurypterus Brewsteri*, H. Woodw. 1864, Geol. Mag. vol. i. p. 200, pl. x. fig. 3; id. 1864, Brit. Assoc. Rep. Bath, sect. C, p. 73; id. 1872, Mon. Pal. Soc., Merostomata, p. 151, pl. xxviii. fig. 4.

**Eurypterus Brodiei**, H. Woodw. 1870.

Passage-Beds from Upper  
Silurian to Old Red Sandstone, Purton, Herefordshire.

*Eurypterus Brodiei*, H. Woodw. 1870, Brit. Assoc. Rep. Liverpool, sect. C, p. 91; id. 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 261; id. 1871, Trans. Woolhope Club; id. 1872, Mon. Pal. Soc., Merostomata, p. 161, with woodcut figure.

**Eurypterus cephalaspis**, Salter, sp., 1846.

Upper Silurian,  
Kendal, Westmoreland.

*Homalonotus?* *cephalaspis*, Salter, 1846, Burmeister's Appen., Ray Soc. p. 125.

*Eurypterus cephalaspis*, McCoy, 1855, Syn. Pal. Foss. Woodw. Mus. p. 175, pl. i. E. fig. 21; Salter, 1855, Syn. Pal. Foss. Appendix A, p. v.

**Eurypterus chartarius**, Salter, 1859.

Upper Ludlow Rock,  
Lesmahagow, Lanarkshire.

*Eurypterus chartarius*, Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 234.

**Eurypterus Hibernicus**, Baily, sp., 1869.

Upper Old Red Sandstone,  
Kiltorcan, co. Kilkenny, Ireland.

*Eurypterus Scouleri* (?), Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 232, pl. x. figs. 2, 3.

*Pterygotus Hibernicus*, Baily, 1869, Brit. Assoc. Rep. Exeter, sect. C, p. 75.

*E. Hibernicus*, H. Woodw. 1872, Mon. Pal. Soc., Merostomata, p. 148, pl. xxviii. figs. 16, 17, and 17a, and woodcuts.

- Eurypterus lanceolatus**, Salter, 1856. Upper Ludlow Rock,  
Lesmahagow, Lanarkshire.  
*Himantopterus lanceolatus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii.  
p. 32, woodcut p. 28, fig. 5.  
*Eurypterus chartarius*, Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 234.  
*E. lanceolatus*, Salter, 1859, Mem. Geol. Surv. Mon. i. p. 65, pl. i. fig. 17;  
H. Woodw. 1864, Geol. Mag. vol. i. pl. v. figs. 7-9, p. 107; id. 1872, Mon.  
Pal. Soc. Merostomata, p. 140, pl. xxviii. figs. 1-3, and woodcut.
- Eurypterus linearis**, Salter, 1859. U. Ludlow Rock of Ludlow, and  
Downton Sandstone of Kington, Herefordshire.  
*Eurypterus linearis*, Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 234,  
pl. x. figs. 15, 16; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, p. 147,  
pl. xxviii. figs. 10-12.
- Eurypterus obesus**, H. Woodw. 1868. Upper Silurian, Lanarkshire.  
*Eurypterus obesus*, H. Woodw. 1868, Quart. Journ. Geol. Soc. vol. xxiv.  
p. 293, pl. x. fig. 1; id. 1872, Mon. Pal. Soc. Merostomata, p. 160, pl. xxx.  
fig. 8, and woodcut.
- Eurypterus punctatus**, Salter, sp., 1859. U. Ludlow, Whitcliffe,  
Kendal, Ludlow; L. Ludlow, Leintwardine; Wenlock Limest.  
and Shale, Dudley.  
*Pterygotus punctatus*, Salter, 1859, Mem. Geol. Surv. Mon. i. p. 99, pl. x., pl. xi.  
figs. 5-9 and 12-15, pl. xiii. figs. 5, 6, 9, 10, 11, 14.  
*Eurypterus punctatus*, H. Woodw. 1868, Quart. Journ. Geol. Soc. vol. xxiv.  
p. 290; id. 1872, Mon. Pal. Soc. Merostomata, p. 153, pl. xxix. fig. 2, and  
woodcuts.
- Eurypterus pygmæus**, Salter, 1856. Downton Sandstone, Upper  
Ludlow Rock, Kington and Ludlow.  
*Eurypterus pygmæus*, Salter, in Banks, 1856, Quart. Journ. Geol. Soc. vol. xii.  
p. 99, pl. ii. fig. 4; id. 1859, *op. cit.* vol. xv. p. 232, pl. x. figs. 4-8; H.  
Woodw. 1872, Mon. Pal. Soc. Merostomata, p. 144, pl. xxviii. figs. 5-7.
- Eurypterus scorioides**, H. Woodw. 1868. U. Silurian, Lesmahagow,  
Lanarkshire.  
*Eurypterus scorioides*, H. Woodw. 1868, Quart. Journ. Geol. Soc. vol. xxiv.  
p. 292, pl. ix. fig. 1, pl. x. fig. 2; 1872, Mon. Pal. Soc. Merostomata, p. 152,  
pl. xxix. fig. 1, pl. xxx. fig. 9.
- Eurypterus Scouleri**, Hibbert, 1836. Carb. L. Kirkton, Bathgate,  
West Lothian.  
*Eidothea*, Scouler, 1831, Cheek's Edinb. Journ. of Nat. and Geogr. Sci. new  
series, no. vi. June 1831, pl. x. p. 352.  
*Eurypterus Scouleri*, Hibbert, 1836, Trans. Roy. Soc. Edinb. vol. xiii. pt. 1.  
p. 280, pl. xii.; id. 1863, Salter, Quart. Journ. Geol. Soc. vol. xix. p. 82;  
id. 1859, Page's Advanced Text-book of Geology, 2nd edit. p. 189  
(with a woodcut); H. Woodw. 1872, Mon. Pal. Soc. Merostomata, p. 133,  
& Postscript, p. 180, pls. xxv.-xxvii. and woodcuts.
- Eurypterus Stevensoni**, R. Eth. jun. 1876. L. Carb. Series, Scotland.  
*Eurypterus Stevensoni*, R. Eth. jun. 1876, Proc. Geol. Soc. (Dec. 20, 1876).

**HEMIASPIS**, H. Woodw. 1864.

*Limuloides*, Salter, MS., Mus. Pract. Geol.

*Hemiaspis*, H. Woodw. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 490; Murch. 1867, Siluria, p. 518.

*Distribution*. Upper Silurian.

**Hemiaspis horrida**, H. Woodw. 1872.

Wenlock Shale, Dudley.

*Hemiaspis horridus*, H. Woodw. Geol. Mag. 1872, vol. ix. pl. x. fig. 6, p. 437, woodcut fig. 6; id. 1872, Mon. Pal. Soc. p. 179, pl. xxx. fig. 6, and woodcut.

**Hemiaspis limuloides**, H. Woodw. sp., 1864.

Lower Ludlow Rocks,  
Leintwardine, Shropshire.

*Hemiaspis limuloides*, H. Woodw. 1864, Brit. Assoc. Report, sect. C, Bath Meeting: id. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 490, pl. xiv. figs. 7 a, 7 c; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 24; Murch. 1867, Siluria, p. 518; H. Woodw. 1872, Mon. Pal. Soc. p. 174, pl. xxx. figs. 1, 2, and woodcuts.

**Hemiaspis Salweyi**, Salter, 1865.

Upper Ludlow Rock, Ludlow;  
Lower Ludlow, Ledbury.

*Hemiaspis Salweyi*, Salter & H. Woodw. 1865, Chart Fossil Crustacea, fig. 3; H. Woodw. 1872, Geol. Mag. vol. ix. pl. x. fig. 4, p. 438, woodcut fig. 7; id. 1872, Mon. Pal. Soc. p. 179, pl. xxx. fig. 4, and woodcut.

*Limuloides tuberculatus*, Salter, MS. (Museum Pract. Geol.).

**Hemiaspis sperata**, H. Woodw. 1872.

L. Ludlow, Leintwardine.

*Hemiaspis speratus*, H. Woodw. Geol. Mag. 1872, vol. ix. pl. x. figs. 5-7, p. 439, and woodcut fig. 5; id. 1872, Mon. Pal. Soc. p. 178, pl. xxx. figs. 5 and 7, and woodcut.

*Limuloides speratus*, Salter, MS. Mus. Pract. Geol.

*L. optatus*, Salter, MS. *ibid*.

**PTERYGOTUS**, Agassiz, 1844.

*Pterygotus*, Agassiz, 1844, Mon. des Poissons Fossiles, p. xix; H. Miller, 1847, The Old Red Sandstone, 3rd edit. p. 182; McCoy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 393; Salter, 1852, Quart. Journ. Geol. Soc. vol. viii. p. 336; D. Page, 1856, Brit. Assoc. Rep. Glasgow, pp. 89-91; Huxley & Salter, 1859, Mem. Geol. Surv. mon. i. p. 105; H. Woodw. 1863, Intellectual Observer, vol. iv. p. 229; Lyell, 1865, Elements Geol. 6th edit. p. 524.

*Himantopterus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 27.

*Distribution*. Upper Silurian and Devonian.

**Pterygotus anglicus**, Agassiz, 1844.

Old Red Sandstone,  
Forfarshire, &c.

*Pterygotus anglicus*, Agassiz, 1844, Poissons Foss. Vieux Grès-rouge, pl. i.; McCoy, in Lyell's Elements (1855), 5th edit.; Salter, in Murch. Siluria, 3rd edit. 1859, &c.; id. 1859, Mem. Geol. Surv. mon. i. p. 67, pls. iii.-vii.; H. Woodw. 1865, in Lyell's Elements of Geology, 6th edit. p. 524, fig. 591 (restored); id. Mon. Pal. Soc. 1866, Merostomata, pt. 1, p. 33, pls. i.-viii.

**Pterygotus arcuatus**, Salter, 1859.

L. Ludlow Rock, Leintwardine.

*Pterygotus arcuatus*, Salter, 1859, Memoirs Geol. Surv. mon. i. p. 95, pl. xiii. figs. 8, 12, 13, 15, and 16; H. Woodw., 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 88, woodcuts figs. 21-23; Salter, 1873, Cat. Camb. & Sil. Foss. p. 165.

**Pterygotus Banksii**, Salter, 1856. Passage Beds, Ludlow : U. Ludlow Rock, Whitcliffe &c. : Downton Sandstone, Kington, Herefordshire.

*Himantopterus Banksii*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. pp. 32 & 99, pl. ii. fig. 5 ; id. Siluria, 3rd edit. p. 266, foss. 66. fig. 1.

*Pterygotus Banksii*, Salter, Mem. Geol. Surv. mon. i. 1859, p. 51, pl. xii. figs. 22-46 ; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 72, pl. xvi. figs. 2-6 ; Salter, 1873, Cat. Camb. & Sil. Foss. p. 189.

**Pterygotus bilobus**, Salter, 1856. U. Ludlow Rock, Lesmahagow, Lanarkshire.

*Himantopterus bilobus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 29, fig. 1 ; id. 1859, Siluria, 3rd edit. p. 178, foss. 25. figs. 1-4.

*Pterygotus bilobus*, Salter, 1859, Mem. Geol. Surv. mon. i. p. 39, pl. i. figs. 1-12 ; Salter, 1873, Cat. Camb. & Sil. Foss. p. 179.

**Pterygotus bilobus**, var. *α. inornatus*, Woodw. 1869. U. Ludlow Rock, Lesmahagow, Lanarkshire.

*Himantopterus bilobus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 29, fig. 1 ; id. Page's Advanced Textbook, 1856, p. 135, fig. 1 ; id. 1859, Siluria, 3rd edit. p. 178, foss. 25. figs. 1-4.

*Pterygotus bilobus*, Salter, 1859, Mem. Geol. Surv. mon. i. p. 39, pl. i. figs. 1-12.

*Pterygotus bilobus*, var. *inornatus*, H. Woodw. 1869, Mon. Pal. Soc. Merostomata, pt. 2, p. 55, pl. x. figs. 1-3.

**Pterygotus bilobus**, var. *β. crassus*, H. Woodw. 1869. U. Ludlow Rock, Lesmahagow, Lanarkshire.

*Pterygotus bilobus*, var. *β. crassus*, H. Woodw. 1869, Mon. Pal. Soc. Merostomata, pt. 2, p. 62, pl. xi. fig. 1.

**Pterygotus bilobus**, var. *γ. perornatus*, Salter, 1856. U. Ludlow Rock, Lesmahagow, Lanarkshire.

*Himantopterus perornatus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. pp. 31 & 28, fig. 6.

*Pterygotus perornatus*, Salter, Mem. Geol. Surv. mon. i. 1859, p. 45, pl. i. figs. 13-16, pl. xv. fig. 2.

*Pterygotus bilobus*, var. *γ. perornatus*, H. Woodw. 1869, Mon. Pal. Soc. Merostomata, pt. 2, p. 63, pl. xi. fig. 2 ; Salter, 1873, Cat. Camb. & Sil. Foss. p. 179.

**Pterygotus bilobus**, var. *δ. acidens*, H. Woodw. 1869. U. Ludlow Rock, Lesmahagow, Lanarkshire.

*Pterygotus bilobus*, var. *δ. acidens*, H. Woodw. 1869, Mon. Pal. Soc. Merostomata, pt. 2, p. 68, pl. xii.

**Pterygotus gigas**, Salter, 1859. U. Ludlow Rock, Kington, Hereford.

*Pterygotus problematicus*, Banks, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 93, &c.

*Pterygotus gigas*, Salter, 1859, Mem. Geol. Surv. mon. i. p. 83, pls. viii. & ix. ; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 79, woodcut fig. 17 ; Salter, 1873, Cat. Camb. & Sil. Foss. p. 189.

**Pterygotus ludensis**, Salter, 1859. Old Red Sandstone. Ludlow.

*Pterygotus ludensis*, Salter, 1859, Mem. Geol. Surv. mon. i. p. 79, pls. ix., xii., & xiv. ; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 76, pl. xvi. figs. 7-9 ; Salter, 1873, Cat. Camb. & Sil. Foss. p. 193.

**Pterygotus minor**, H. Woodw, 1864. Old Red Sandstone, Farnell by Brechin.

*Pterygotus minor*, H. Woodw. Geol. Mag. 1864, vol. i. p. 199, pl. x. fig. 2; id. Mon. Pal. Soc. 1866, Merostomata, pt. 1, p. 35, pl. i. fig. 4.

**Pterygotus problematicus**, Agassiz, 1839. U. Ludlow Rock, Whiteliffe, Ludlow, &c., Kendal (Westmoreland), &c.

*Pterygotus problematicus*, Agassiz, in Sil. Syst. (1839), p. 606, pl. iv. figs. 4, 5; Salter, 1852, Quart. Journ. Geol. Soc. vol. viii. pl. xxi. figs. 1, 2; id. Siluria, 3rd edit. pl. xix. figs. 4-6; id. 1859, Mem. Geol. Surv. monograph i. p. 89, pls. xii. & xix.; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 85, woodcut fig. 20; Salter, 1873, Cat. Camb. & Sil. Foss. p. 188.

**Pterygotus raniceps**, H. Woodw. 1868. U. Silurian Rocks, Lanarkshire.

*Pterygotus raniceps*, H. Woodw. 1868, Quart. Journ. Geol. Soc. vol. xxiv. p. 294, pl. ix. fig. 3; id. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 71, pl. xvi. fig. 1.

**Pterygotus stylops**, Salter, 1859. Downton Sandstone, Kington, Herefordshire.

*Pterygotus* (?) *stylops*, Salter, Mem. Geol. Surv. Mon. i. 1859, p. 55, pl. xii. fig. 47; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 91, woodcut fig. 24.

**Pterygotus**, sp., Salter, 1873. Silurian, Benson's Knott.

*Pterygotus*, sp., Salter, 1873, Cat. Camb. & Sil. Foss. p. 179.

**Pterygotus taurinus**, Salter, 1868. Lower Old Red, or Ledbury Shales formation, Ewyas Harold, Abergavenny.

*Pterygotus taurinus*, Salter, 1868, Brit. Assoc. Rep. Sect. p. 78; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, pp. 75, 76, woodcut fig. 14.

### SLIMONIA, D. Page, 1856.

*Himantopterus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 29; D. Page, 1859, Advanced Text-book, 2nd edit. p. 163.

*Pterygotus*, Salter, 1859, Mem. Geol. Surv. mon. i. p. 57.

*Slimonia*, D. Page, 1856, Advanced Text-book, p. 135; H. Woodw. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 105.

*Distribution.* Upper Silurian.

**Slimonia acuminata**, Salter, sp., 1856. U. Ludlow Rock, Lesmahagow, Lanarkshire.

*Himantopterus acuminata*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 29, fig. 4; D. Page, 1859, Advanced Text-book, 2nd edit. p. 163, figs. A, B, p. 159, fig. 2.

*H. maximus*, Salter, 1856, Quart. Journ. Geol. Soc. vol. xii. p. 28, fig. 3.

*Pterygotus acuminata*, Salter, 1859, Mem. Geol. Surv. mon. i. p. 57, pl. ii., pl. xiii. figs. 1-4, pl. xv. fig. 1.

*Slimonia acuminata*, D. Page, 1856, Advanced Text-book, p. 135, fig. 3; H. Woodw. 1863, Intellectual Observer, vol. iv. p. 229, plate; id. 1872, Mon. Pal. Soc. Merostomata, pt. 3, p. 105, pls. xvii.-xx.; Salter, 1873, Cat. Camb. & Sil. Foss. p. 179, and woodcut.

### STYLONURUS, Page, 1855.

*Stylonurus*, Page, 1855, Brit. Assoc. Rep. p. 89; H. Woodw. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 486.

*Eurypterus*, Salter, 1857, Edinb. New Phil. Journ. vol. vi. p. 257.

*Distribution.* Silurian and Old Red Sandstone.



- Stylonurus ensiformis**, H. Woodw. 1864. Old Red Sandstone, Forfarshire.  
*Stylonurus ensiformis*, H. Woodw. 1864, Geol. Mag. vol. i. pp. 198, 199, with figure; id. 1872, Mon. Pal. Soc. Merostomata, p. 126, pl. xxi. fig. 5.
- Stylonurus Logani**, H. Woodw. 1864. U. Ludlow, Logan Water, Lesmahagow, Lanarkshire.  
*Stylonurus spinipes*, Page, 1859, Advanced Text-book, 2nd edit. p. 181. fig. 1 (no description).  
*S. Logani*, H. Woodw. 1864, Geol. Mag. vol. i. p. 197, pl. x. fig. 1; id. 1872, Mon. Pal. Soc. Merostomata, p. 129, pl. xxiv. fig. 1, and woodcut.
- Stylonurus megalops**, Salter, sp., 1859. Old Red Sandstone, Ludlow.  
*Eurypterus megalops*, Salter, 1859, Quart. Journ. Geol. Soc. vol. xv. p. 233, pl. x. figs. 9-14.  
*Stylonurus megalops*, H. Woodw. 1865, *op. cit.* vol. xxi. p. 486; id. 1872, Mon. Pal. Soc. Merostomata, p. 124, pl. xxi. figs. 3, 3a.
- Stylonurus Powriei**, Page, 1855. Old Red Sandstone, Pitseandly, Forfarshire; U. Silurian, Lesmahagow.  
*Stylonurus*, sp., Page, 1855, Brit. Assoc. Report, Glasgow, p. 89.  
*S. Powriei*, Page, 1856, Advanced Text-book of Geology, p. 135, fig. 2.  
*S. Powriei*, Page, 1859, *op. cit.* 2nd ed. p. 181, fig. 3; H. Woodw. 1864, Brit. Assoc. Report, Bath, p. 73; id. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 482, pl. xii. fig. 1; id. 1872, Mon. Pal. Soc. Merostomata, p. 122, pl. xxi. fig. 1 (and fig. 2?).
- Stylonurus Scoticus**, H. Woodw. 1864. Old Red Sandstone, Forfar.  
*Stylonurus Scoticus*, H. Woodw. 1864, Brit. Assoc. Report, Bath, p. 73; id. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 484, pl. xiii. figs. 2, 3; id. 1872, Mon. Pal. Soc. Merostomata, p. 126, pls. xxii. & xxiii.
- Stylonurus Symondsii**, Salter, sp., 1857. Cornstones of Rowlestone, Brecknockshire.  
*Eurypterus Symondsii*, Salter, 1857, Edinb. New Phil. Journ. new series, vol. vi. pl. 257; id. 1859, in Murchison's Siluria, 3rd. edit. p. 274, woodcut (fossils 68); id. 1859, Quart. Journ. Geol. Soc. vol. xv. p. 230, pl. x. fig. 1.  
*Stylonurus Symondsii*, H. Woodw. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 486, pl. xiii. fig. 4; Murchison's Siluria, 1867, 4th edit. p. 246. fossils (69); H. Woodw. 1872, Mon. Pal. Soc. Merostomata, p. 124, pl. xxi. fig. 4.

## Order VIII. PHYLLOPODA.

### APTYPCHOPSIS, H. Woodw. 1872.

- Aptychopsis*, H. Woodw. 1872, Geol. Mag. vol. ix. p. 564; id. 1873, Brit. Assoc. Rep. Brighton, 1872; J. Armstrong & others, "Catalogue of the Western Scottish Fossils," Glasgow, 1876, p. 7.  
*Distribution.* Middle Silurian.
- Aptychopsis glabra**, H. Woodw. 1872. Middle Silurian, near Hawick.  
*Aptychopsis glabra*, H. Woodw. 1872, Geol. Mag. vol. ix. p. 565; id. 1873, Brit. Assoc. Rep. Brighton, 1872.

**Aptychopsis Lapworthi**, H. Woodw. 1872. Middle Silurian, near Hawick.

*Aptychopsis Lapworthi*, H. Woodw. 1872, Geol. Mag. vol. ix. p. 565; id. 1873, Brit. Assoc. Rep. Brighton, 1872.

**Aptychopsis Wilsoni**, H. Woodw. 1872. Middle Silurian, Yad's Lynn, near Hawick.

*Aptychopsis Wilsoni*, H. Woodw. 1872, Geol. Mag. vol. ix. p. 565; H. Woodw. 1873, Brit. Assoc. Rep. Brighton, 1872; J. Armstrong & others, "Catalogue of the Western Scottish Fossils," Glasgow, 1876, p. 7.

### CARYOCARIS, Salter, 1862.

*Caryocaris*, Salter, 1862, Quart. Journ. Geol. Soc. vol. xix. p. 139.

*Distribution.* Cambrian and Silurian.

**Caryocaris Marrii**, Hicks, 1876. (Arenig) Cambrian Shales, near Caernarvon.

*Caryocaris Marrii*, Hicks, 1876, Quart. Journ. Geol. Soc. vol. xxxii. p. 138.

**Caryocaris Wrightii**, Salter. Skiddaw Slate, Barff, Skiddaw, Longside.

*Caryocaris Wrightii*, Salter, Harkness on Skiddaw Slates, Quart. Journ. Geol. Soc. vol. xix. p. 139, fig. 15.

### CERATIOCARIS, M'Coy, 1849.

*Onchus*, Agassiz, 1839, Sil. Syst.

*Ceratiocaris*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 412; Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 158; H. Woodw. 1866, Geol. Mag. p. 203; Murch. 1867, Siluria, p. 516.

*Leptocheles*, M'Coy, 1850, Pal. Foss. p. 176.

*Pterygotus*, M'Coy, 1850, Pal. Foss. p. 175.

*Dithyrocaris*, Salter, 1852, Quart. Journ. Geol. Soc. vol. viii.

*Distribution.* Silurian to Carboniferous.

**Ceratiocaris aptychoides**, Salter, 1860. Silurian, Duffkinnell, Dumfriesshire.

*Dithyrocaris aptychoides*, Salter, 1852, Quart. Journ. Geol. Soc. vol. viii. pl. xxi. fig. 10.

*Ceratiocaris aptychoides*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 161.

**Ceratiocaris cassia**, Salter, 1860. Lower Ludlow, Leintwardine.

*Ceratiocaris cassia*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 159; Salter, 1867, Murch. Siluria, p. 516.

**Ceratiocaris decorus**, Salter, 1860. Ludlow Rock, Freshwater East, Pembrokeshire.

*Ceratiocaris decorus*, Phill. 1848, Mem. Geol. Surv. vol. i. pt. 2, pl. xxx. fig. 5; Murch. 1867, Siluria, p. 516; Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 158.

*Leptocheles ellipticus*, M'Coy, 1850, Pal. Foss. p. 176.

**Ceratiocaris ellipticus**, M'Coy, 1849. Upper Silurian, Benson's Knot, Kendal.

*Ceratiocaris ellipticus*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 431; M'Coy, 1855, Pal. Foss. Woodw. Mus. p. 137, pl. i. E. fig. 8.

- Ceratiocaris? ensis**, Salter, 1860. Lower Ludlow, Leintwardine.  
*Ceratiocaris? ensis*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 159; Murch. 1867, Siluria, p. 516.
- Ceratiocaris inornatus**, M'Coy, 1855. Upper Silurian, Benson's Knot, Kendal.  
*Ceratiocaris inornatus*, M'Coy, 1855, Pal. Foss. Woodw. Mus. p. 137, pl. i. E. fig. 4; Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 156; Murch. 1867, Siluria, p. 516.
- Ceratiocaris insperatus**, Salter, 1866. Tremadoc Slate, Penmorfa, Portmadoc.  
*Ceratiocaris insperatus*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 295, woodcut *f*; 1867, Murchison, Siluria, p. 516.
- Ceratiocaris latus**, Salter, 1866. Upper Tremadoc, Garth, Portmadoc.  
*Ceratiocaris latus*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 264, & woodcut; Murch. 1867, Siluria, p. 516.
- Ceratiocaris Ludensis**, H. Woodw. 1871. Lower Ludlow, Church Hill, Leintwardine, Shropshire.  
*Ceratiocaris Ludensis*, H. Woodw. 1871, Geol. Mag. vol. viii. p. 104, pl. iii. fig. 3.
- Ceratiocaris Murchisoni**, M'Coy, 1850. Upper Ludlow Rocks, Ludlow; Wenlock Shale, Dudley, Kirkby Lonsdale, Westmoreland.  
*Onchus Murchisoni*, Agassiz, 1839, Sil. Syst. t. iv. figs. 10 & 64.  
*Pterygotus leptodactylus*, M'Coy, 1850, Pal. Foss. pl. i. e. fig. 7, p. 175.  
*Ceratiocaris Murchisoni*, M'Coy, 1859, Siluria, 3rd edit. pl. xix. fig. 1, p. 538; Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 157; H. Woodw. 1866, Geol. Mag. p. 203, pl. x. figs. 8-10; Murch. 1867, Siluria, p. 516, pl. xix. figs. 1, 2.
- Ceratiocaris Oretonensis**, H. Woodw. 1871. Carboniferous L., Oreton and Farlow, Worcestershire.  
*Ceratiocaris Oretonensis*, H. Woodw. 1871, Geol. Mag. vol. viii. p. 105, pl. iii. fig. 1.
- Ceratiocaris papilio**, Salter, 1859. Upper Silurian, Lanarkshire.  
*Ceratiocaris papilio*, Salter, 1859, Murch. Siluria, 3rd edit. p. 538; Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 155, figs. 1, 2, 3; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17. fig. 5; Salter, 1867, Murch. Siluria, p. 236 (foss. fig. 1), p. 516.
- Ceratiocaris robustus**, Salter, 1860. Upper Ludlow, Leintwardine.  
*Ceratiocaris robustus*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 158; id. 1867, Murch. Siluria, p. 516.  
*Pterygotus leptodactylus*, M'Coy, 1850, Pal. Foss. pl. i. E. figs. 7*c*, 7*f*.
- Ceratiocaris solenoides**, M'Coy, 1849. Upper Silurian, Benson's Knot, Kendal.  
*Ceratiocaris solenoides*, M'Coy, 1849, Ann. & Mag. Nat. Hist. 2nd ser. vol. iv. p. 413; M'Coy, 1855, Pal. Foss. p. 138, pl. i. E. fig. 5.

- Ceratiocaris stygius**, Salter, 1860. Upper and Lower Ludlow,  
Lesmahagow.  
*Ceratiocaris stygius*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 156;  
Salter, 1867, Siluria, p. 517.

- Ceratiocaris** (teeth of), H. Woodw. 1865. Upper Ludlow Rocks,  
Scotland.  
*Ceratiocaris* (teeth of), H. Woodw. 1865, Geol. Mag. vol. ii. p. 403, pl. xi.  
fig. 2.

- Ceratiocaris truncatus**, H. Woodw. 1871. Carboniferous Limestone,  
Oreton and Farlow, Worcestershire.  
*Ceratiocaris truncatus*, H. Woodw. 1871, Geol. Mag. vol. viii. p. 106, pl. iii.  
fig. 2.

- Ceratiocaris** (**Physocaris**) **vesica**, Salter, 1860. Upper Silurian,  
Shropshire.  
*Ceratiocaris* (*Physocaris*) *vesica*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser.  
vol. v. p. 159; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17,  
fig. 8; 1867, Murch. Siluria, p. 517.

#### **DICTYOCARIS**, Salter, 1860.

- Dictyocaris*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v. p. 162; H.  
Woodw. & Salter, Cat. & Chart Foss. Crust. p. 17.  
*Distribution*. Upper Silurian.

- Dictyocaris Ramsayi**, Salter, 1860. Upper Silurian, S. Scotland.  
*Dictyocaris Ramsayi*, Salter, 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. v.  
p. 162, fig. 1; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17,  
fig. 9.

#### **DISCINOCARIS**, H. Woodw. 1866.

- Discinocaris*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii. p. 504.  
*Distribution*. Lower Silurian.

- Discinocaris Browniana**, H. Woodw. 1866. Moffat Shales (Lower  
Silurian), Dumfriesshire.  
*Discinocaris Browniana*, H. Woodw. 1866, Quart. Journ. Geol. Soc. vol. xxii.  
p. 504, pl. xxv. figs. 4-7.

#### **DITHYROCARIS**, Scouler, 1835.

- Dithyrocaris*, Scouler, 1835, Record of Science; Portlock, 1843, Rep. Geol.  
Londonderry, p. 314; M'Coy, 1844, Carb. Foss. Irel. p. 163; Salter &  
Woodw. 1865, Cat. & Chart Foss. Crust. p. 17; H. Woodw. 1871, Geol.  
Mag. p. 106.

*Distribution*. Old Red Sandstone and Carboniferous.

- Dithyrocaris Colei**, Portlock, 1843. Carboniferous Limestone Shales,  
Tyrone and Derry.  
*Dithyrocaris Colei*, Portlock, 1843, Geol. Report on Londonderry, Tyrone, &c.,  
p. 314, pl. xii.; M'Coy, 1844, Synop. Carb. Foss. Ireland, p. 163.

- Dithyrocaris glabra**, H. Woodw. & R. Eth. jun. 1874. L. Carboniferous Limest., East Kilbride.  
*Dithyrocaris glabra*, H. Woodw. & R. Eth. jun. 1874, Geol. Mag. p. 108, pl. v. figs. 4, 5; id. 1873, Mem. Geol. Surv. Expl. Sheet 23, Scotland, p. 99.
- Dithyrocaris granulata**, H. Woodw. & R. Eth. jun. 1874. L. Carbonif. Limest., East Kilbride.  
*Dithyrocaris granulata*, H. Woodw. & R. Eth. jun. 1874, Geol. Mag. p. 108, pl. v. figs. 2, 3; id. 1873, Mem. Geol. Surv. Scot. Expl. Sheet 23, p. 99.
- Dithyrocaris orbicularis**, Portl. 1843. Carboniferous Limest. shale, Derry.  
*Dithyrocaris orbicularis*, Portlock, 1843, Geol. Rep. Londonderry, p. 316; M'Coy, 1844, Carb. Foss. Ireland, p. 163.
- Dithyrocaris ovalis**, H. Woodw. & R. Eth. jun. 1874. L. Carbonif. Limest., East Kilbride.  
*Dithyrocaris ovalis*, H. Woodw. & R. Eth. jun. 1874, Geol. Mag. p. 107, pl. v. fig. 1; id. Mem. Geol. Surv. Expl. Sheet 23, Scotland, 1873, p. 100.
- Dithyrocaris Scouleri**, M'Coy, 1844. Carboniferous, Ireland.  
*Dithyrocaris Scouleri*, M'Coy, 1844, Carb. Foss. Irel. pl. xxiii. fig. 2, p. 163; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17, fig. 10.
- Dithyrocaris? striata**, H. Woodw. & R. Eth. jun. 1874. Lower Red Sandstone, Carmichael Burn, S.E. of Lanark.  
*Dithyrocaris? striata*, H. Woodw. & R. Eth. jun. 1874, Geol. Mag. p. 109, pl. v. fig. 6; id. 1873, Mem. Geol. Surv. Expl. Sheet 23, Scotland, p. 100.
- Dithyrocaris (teeth of)**, H. Woodw. 1865. U. Ludlow Rock, Scotland.  
*Dithyrocaris (teeth of)*, H. Woodw. 1865, Geol. Mag. vol. ii. p. 403, pl. xi. figs. 3-6.
- Dithyrocaris tenuistriata**, M'Coy, 1844. Carbonif. Limest., Settle, Yorkshire, and Ireland.  
*Dithyrocaris tenuistriata*, M'Coy, 1844, Carb. Foss. Ireland, p. 164, pl. xxiii. fig. 3; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17, fig. 13; H. Woodw. 1871, Geol. Mag. p. 106, pl. iii. fig. 4.
- Dithyrocaris testudinea**, Scouler, 1835. L. Carboniferous Limest., Glasgow, East Kilbride.  
*Dithyrocaris testudinea*, Scouler, 1835, Rec. Sc. p. 136; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17, fig. 11; H. Woodw. & R. Eth. jun. 1873, Geol. Mag. p. 482, pl. xvi. fig. 1.
- Dithyrocaris tricornis**, Scouler, 1835. L. Carbonif. Limest., East Kilbride, Glasgow.  
*Dithyrocaris (Argas) tricornis*, Scouler, 1835, Rec. Sc. p. 136; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17, fig. 12; H. Woodw. & R. Eth. jun. 1873, Geol. Mag. p. 483, pl. xvi. figs. 2, 3.

**ESTHERIA**, Straus-Dürckheim, 1838.

*Estheria*, Straus-Dürckheim, 1838, Mus. Senckenb. ii. p. 119; Lovén, 1846, Öfvers. af K. Vet.-Ak. Förh. Stockholm, 1847, p. 59; Baird, 1849, Proc. Zool. Soc. p. 89; Fischer, 1860, Abhandl. k. bayer. Akad. Wiss. München, viii. p. 649; Jones, 1862, Mon. Pal. Soc. Fossil Estheriæ, p. 6.

*Limnadia*, Ad. Brongn.; Baird, 1849, Proc. Zool. Soc. p. 86.

*Limnetis*, Müller, Entomost. p. 69.

*Distribution.* Devonian to Tertiary. Recent, fresh and brackish water.

**Estheria Adamsii**, Jones, sp., 1870. Carboniferous Shales, S. Wales.

*Estheria Adamsii*, Jones, sp., 1870, Geol. Mag. vol. vii. p. 217, pl. ix. figs. 1, 2.

**Estheria concentrica**, Bean, sp., 1836. Inf. Oolite (Plant-bed), Scarborough.

*Cypris concentrica*, Bean, Mag. Nat. Hist. 1836, vol. ix. p. 376, fig. 54; Jones, Mon. Pal. Soc. p. 101, pl. iii. figs. 13-17.

**Estheria elliptica**, Dunker, 1843. Wealden, Bulverhithe, Sussex; Tunbridge Wells and Hastings; Hanover, Germany.

*Cyclas subquadrata*, Sowerby, Fitton's Strata below the Chalk, Trans. Geol. Soc. 2nd ser. vol. iv. pt. 2, 1836, p. 177, and p. 345, pl. 21. fig. 8.

*Estheria elliptica* and *E. subquadrata*, Dunker, Programm höh. Gewerbschule Cassel, 1843, p. 41, &c. &c.; id. Monographie norddeutsch. Wealdenbildung, 1846, pp. 61, 62, pl. xiii. fig. 33; Jones, Mon. Pal. Soc. 1862, p. 103, pl. iii. figs. 18-29, and pl. iv. figs. 1-7.

**Estheria elliptica**, var. *subquadrata*, Jones. Wealden, St. Leonards, Sussex, &c.

Pal. Tr. 1862, pp. 103-109, pl. iii. figs. 18-29.

**Estheria membranacea**, Pacht, sp., 1849. Old Red Sandstone: Caithness, &c., Scotland; Livonia, &c., Russia.

*Asmusia membranacea*, Pacht, Der devonische Kalk in Livland, 1849, p. 44.

*Estheria Murchisoniana*, R. Jones, Quart. Journ. Geol. Soc. 1859, vol. xv. p. 404, figs. 14 c, d; Jones, Mon. Pal. Soc. 1862, Fossil Estheriæ, p. 14, pl. i. figs. 1-7.

**Estheria minuta**, Alberti, sp., 1832. Keuper, Worcestershire, Warwickshire, Somersetshire; Bunter, France; Bunter and Keuper, Hanover; Lettenkohle, Germany.

*Posidonia minuta*, Alberti, Von Dechen's De la Beche's Handbuch der Geologie, 1832, p. 453, &c.; Goldfuss, Petrefact. Germaniæ, pt. 2, 1834-40, p. 118, pl. 113. fig. 5, &c.

*Posidonomya minuta*, Bronn, 1835-8, vol. i. p. 164, pl. xi. fig. 22.

*Estheria minuta*, Jones, Quart. Journ. Geol. Soc. vol. xii. p. 376, Mon. Pal. Soc. 1862, Fossil Estheriæ, p. 42, pl. i. figs. 28-30, pl. ii. figs. 1-7, pl. v. figs. 8, 9.

**Estheria minuta**, var. *Brodieana*, Jones, 1862. Rhætic Beds: Somerset, Warwick, and Worcestershire; Morayshire, Scotland.

*Estheria minuta*, var. *Brodieana*, Jones, 1862, Mon. Pal. Soc. Foss. Estheriæ, p. 66, pl. ii. figs. 8-15.

- Estheria Murchisoniæ**, Jones, 1862. M. Oolite, Isle of Skye.  
*Estheria tellina* (?), Murchison, Trans. Geol. Soc. 2nd ser. 1827, vol. ii. p. 311.  
*E. Murchisoniæ*, Jones, 1862, Mon. Pal. Soc. p. 100, pl. iii. figs. 1-12.
- Estheria Peachii**, Jones, 1870. Carboniferous Shales, Camstone Quarry, Salisbury Craigs, Edinburgh.  
*Estheria Peachii*, Jones, 1870, Geol. Mag. vol. vii. p. 220, pl. ix. fig. 17.
- Estheria Portlockii**, Jones, 1862. Permian, Rhono Hill, Tyrone, Ireland.  
*Posidonia minuta*, Portlock, Geol. Rep. Londonderry &c. 1843, p. 469.  
*Estheria Portlockii*, Jones, 1862, Mon. Pal. Soc. Foss. Estheriæ, p. 40, pl. i. fig. 25.
- Estheria punctatella**, Jones, 1865. U. Carb. L., Arden Quarry, Renfrewshire; Linn Spout, Dalry; L. Carboniferous Shale, Thornliebank, Lanarkshire.  
*Estheria punctatella*, Jones, 1865, Trans. Geol. Soc. Glasgow, vol. ii. p. 224, pl. i. figs. 5, 5a.
- Estheria striata**, Münster, sp., 1826. L. Carb. Shales: Lammerton, Berwickshire; Lanarkshire; Lancashire; Chesterfield, Derbyshire. Carbonif. Limest., Hof, Bavaria.  
*Estheria striata*, Jones, 1862, Mon. Pal. Soc. p. 23, pl. i. figs. 8-18.  
*Sanguinoluria striata*, Münster & Goldfuss, 1826, Petref. Germ. ii. p. 80, pl. clix. fig. 19.  
*Cardiomorpha striata*, De Koninck, 1842, Anim. Foss. Ter. Carb. Belgique, p. 105, pl. II. figs. 9 a, b, c.
- Estheria striata**, var. **Beinertiana**, Jones, 1862. L. Coal-measures, Lancashire, Lanarkshire, and Silesia.  
 Jones, 1862, Mon. Pal. Soc. p. 25, pl. i. figs. 11-14.
- Estheria striata**, var. **Tateana**, Jones, 1862. L. Carbonif. Limest., Lammerton, Berwickshire.  
 Mon. Pal. Soc. 1862, p. 26, pl. i. figs. 15-18.
- Estheria striata**, var. **Binneyana**, Jones, 1862. L. Coal-measures, Lowndsley Green, near Chesterfield, Derbyshire.  
 Mon. Pal. Soc. 1862, p. 28, pl. i. figs. 8-10.
- Estheria tenella**, Jordan, sp., 1850. U. Coal-measures, Astley and Bradford, Lancashire; near Holytown, Lanarkshire. Permian, &c., of Russia and Saxony.  
*Posidonomya tenella*, Jordan & H. G. Bronn, Neues Jahrb. f. Min. 1850, p. 577; Jones, 1862, Mon. Pal. Soc. p. 31, pl. i. figs. 26, 27, pl. ii. fig. 39, pl. v. figs. 1-7; id. 1870, Geol. Mag. vol. vii. p. 218, pl. ix. fig. 17.

# HYMENOCARIS, Salter, 1852.

- Hymenocaris*, Salter, 1852, Rep. Brit. Assoc. p. 63; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 17; Murch. 1867, Siluria, p. 43.  
*Distribution.* Cambrian.

**Hymenocaris vermicauda**, Salter, 1852.Lower Lingula-Flags,  
Dolgelly and Caernarvon.

*Hymenocaris vermicauda*, Salter, 1852, Report Brit. Assoc. Belfast, p. 63;  
H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 17; Salter, 1866,  
Mem. Geol. Surv. vol. iii. p. 293, pl. ii. figs. 1-4, pl. v. fig. 25; Murch. 1867,  
Siluria, pp. 44 (foss. 6. fig. 1) and 518.

**LEAIA**, Jones, 1862.

*Cypriocardia*, Lea, 1855, Proc. Acad. Nat. Sc. Philad. vii. p. 341.

*Aptychus*?, J. Phillips, 1839, Sil. Syst. p. 89.

*Leaia*, Jones, 1862, Mon. Pal. Soc. (Estheriæ), Append. p. 115; Meek &  
Worthen, 1868, Geol. Illinois (Palæontology), vol. iii. p. 541.

*Distribution*. Carboniferous.

**Leaia Leidyi**, Lea, sp., 1855.Carboniferous Shales, S. Wales;  
base of the Carboniferous, Pennsylvania.

*Cypriocardia Leidyi*, Lea, 1855, Proc. Acad. Nat. Sci. Philadelphia, vol. vii.  
p. 341, pl. iv.

*Leaia Leidyi*, Jones, 1862, Mon. Pal. Soc. p. 116, pl. v. figs. 11, 12; id. 1870,  
Geol. Mag. vol. vii. p. 219, pl. ix. figs. 11-14.

**Leaia Leidyi**, var. **Salteriana**, Jones, 1862.L. Carboniferous Rocks,  
Fifeshire, Scotland.

*Leaia Leidyi*, var. *Salteriana*, Jones, 1862, Mon. Pal. Soc. Foss. Estheriæ,  
Append. p. 110, pl. i. fig. 21.

**Leaia Leidyi**, var. **Williamsoniana**, Jones, 1862.Coal-measures,  
Ardwick, near Manchester.

*Bivalvular Shell*, Williamson, 1806, Phil. Mag. new series, vol. ix. p. 351.

*Aptychus*, Phillips, Sil. Syst. 1839, p. 89.

*Leaia Leidyi*, var. *Williamsoniana*, Jones, 1862, Mon. Pal. Soc. Foss. Estheriæ,  
Append. p. 117, pl. i. figs. 19, 20.

**LINGULOCARIS**, Salter, 1866.

*Lingulocaris*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 294.

*Distribution*. Middle Cambrian.

**Lingulocaris lingulæcomes**, Salter, 1866.Upper Tremadoc, Garth,  
Portmadoc.

*Lingulocaris lingulæcomes*, Salter, 1866, Mem. Geol. Surv. vol. iii. p. 294,  
pl. x. figs. 1, 2; Murch. 1867, Siluria, 4th edit. p. 519; Salter, 1873, Cat.  
Camb. & Sil. Foss. p. 16.

**MYOCARIS**, Salter, 1864.

*Myocaris*, Salter, 1864, Geol. Mag. vol. i. p. 11.

*Distribution*. Silurian.

**Myocaris lutraria**, Salter, 1864.

Silurian, Budleigh-Saltorton.

*Myocaris lutraria*, Salter, 1864, Geol. Mag. vol. i. p. 11, woodcut 4.



**PELTOCARIS**, Salter, 1863.

*Dithyrocaris*, Salter, 1852, Quart. Journ. Geol. Soc. vol. viii. p. 391.

*Peltocaris*, Salter, 1863, op. cit. vol. xix. p. 88.

*Distribution.* Upper and Lower Silurian.

**Peltocaris anatina**, Salter, 1873.

Lower Wenlock Group,  
Rebecca Hill, Ulverston.

*Peltocaris anatina*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 93.

**Peltocaris aptychoides**, Salter, 1852.

Anthracite Shales, Llandeilo  
Flags, Dumfriesshire.

*Dithyrocaris aptychoides*, Salter, 1852, Quart. Journ. Geol. Soc. vol. viii.  
p. 391, pl. xxi. fig. 10.

*Peltocaris aptychoides*, Salter, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 88,  
fig. 1, pl. xxi. fig. 10.

**Peltocaris ? Harknessi**, Salter, 1863.

Anthracite Shales,  
Llandeilo Flags, Dumfriesshire.

*Peltocaris ? Harknessi*, Salter, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 88,  
fig. 2.

**Order IX. CLADOCERA.**

(No Fossil representatives.)

**Order X. OSTRACODA.**

**ÆCHMINA**, Jones & Holl, 1869.

*Æchmina*, Jones & Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. i.  
p. 217.

*Cythere* [*Æchmina* ?] *umbonata*, Williamson, in Jones's Mon. Cretac. Entom.  
Pal. Soc. 1848, pl. ii. fig. 3.

*Distribution.* Wenlock L., Malvern (and 1 sp. in Chalk?).

**Æchmina clavulus**, Jones & Holl, 1869.

Wenlock Limestone, near  
West Malvern.

*Æchmina clavulus*, Jones & Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii.  
p. 218, woodcut fig. 3.

**Æchmina cuspidata**, Jones & Holl, 1869.

Wenlock Limestone, near  
West Malvern.

*Æchmina cuspidata*, Jones & Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser.  
vol. iii. p. 218, pl. xiv. fig. 8, and woodcut fig. 2.

**AGLAIA**, Brady.

*Aglia*, Brady, Les Fonds de la Mer, tome i. p. 90.

*Distribution.* Post-Tertiary, Yorkshire.

- Aglaia ? glacialis***, Brady, Crosskey, & Robertson, 1874. Post-Tertiary, Bridlington, Drip Bridge.  
*Aglaia ? glacialis*, Brady, Crosskey, & Robertson, Mon. Pal. Soc. p. 132, pl. xi. figs. 51-56.

### **ARGILLÆCIA, G. O. Sars, 1865.**

- Argillæcia*, G. O. Sars, 1865, Oversigt af Norges Marine Ostrac. p. 18; Brady, Crosskey, & Robertson, 1874, Mon. Pal. Soc. p. 132.  
*Pontocypris*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 387.  
*Distribution*. Post-Tertiary. Recent, Marine.

### **Argillæcia cylindrica, G. O. Sars, 1865.** Post-Tertiary, Scotland. Recent, Great Britain and Norway.

- Argillæcia cylindrica*, G. O. Sars, 1865, Oversigt af Norges Marine Ostrac. p. 18; Brady, Crosskey, & Robertson, 1874, Mon. Pal. Soc. p. 132, pl. xvi. figs. 29-31.  
*? Pontocypris angusta*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 387, pl. xxxiv. figs. 43, 44.

### **ASTEROPE, Philippi, 1840.**

- Asterope*, Philippi, 1840, Wiegmann Archiv, No. 1; Brady, Crosskey, & Robertson, 1874, Mon. Pal. Soc. p. 218.  
*Cypridina*, Norman, 1861, Ann. & Mag. Nat. Hist. vol. viii.  
*Cylindroleberis*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 465.  
*Distribution*. Post-Tertiary. Recent, Marine.

### **Asterope teres, Norman, 1861.** Post-Tertiary, Scotland. Recent, N. Sea, W. coast of Scotland and Ireland, Scilly and Channel Islands.

- Cypridina teres*, Norman, 1861, Ann. & Mag. Nat. Hist. vol. viii. pl. xiv. fig. 10.  
*Cylindroleberis teres*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 465, pl. xxxiii. figs. 6-9, & pl. xii. fig. 2.  
*Asterope teres*, Brady, 1871, Proc. Zool. Soc. Lond. p. 295; Brady, Crosskey, & Robertson, 1874, Mon. Pal. Soc. p. 218, pl. ii. figs. 33, 34.

### **BAIRDIA, M'Coy, 1844.**

- Cythere*, Münster, 1830, Jahrbuch für Mineral. &c.  
*Cytherina*, Roemer, 1838, Jahrb. für Mineral. &c.; id. 1840, Verstein. norddeutsch. Kreideb.; Reuss, 1845, Verstein. böhmisch. Kreidef.; Bosquet, 1847, Mém. Soc. Royale Liège.  
*Bairdia*, M'Coy, 1844, Syn. Charact. Carb. Limest. Foss. Ireland; Jones, 1849, Mon. Pal. Soc. Entom. p. 22.  
*Distribution*. Carb. Limestone to Tertiary. Recent, Marine.

### **Bairdia ? acuta, Jones, 1850.** Permian, Durham.

- Cythere (Bairdia) acuta*, Jones, 1850, in King's Monog. Perm. Foss. p. 63, pl. xviii. fig. 10; Jones & Kirkby, 1859, Trans. Tynes. Nat. Field-club, p. 163, pl. xi. fig. 16.

### **Bairdia ampla, Reuss, 1854.** Permian, Durham; Wetterau.

- Bairdia ampla*, Reuss, 1854, Jahresb. wetter. Ges. p. 68, figs. 7a, 7b.  
*Cythere (Bairdia) ampla*, Kirkby & Jones, 1859, Trans. Tynes. Nat. Field-club, p. 162, pl. xi. figs. 14a, 14b, 14c; and Appen. p. 166, pl. xi. figs. 19c-19f.

- Bairdia ? Berniciensis**, Kirkby, 1858. Permian, Durham.  
*Bairdia ? Berniciensis*, Kirkby, 1858, Ann. & Nat. Hist. 3rd ser. vol. ii. p. 330, pl. x. fig. 15; Kirkby, 1859, Trans. Tynes. Nat. Field-club, vol. iv. p. 149, pl. ix. fig. 15.
- Bairdia ? Bradyana**, Jones & Kirkby, 1876. Carboniferous, Boghead, Hamilton.  
*Bairdia Bradyana*, Jones & Kirkby, 1876, Cat. West. Scot. Foss. p. 43.
- Bairdia brevis**, Jones & Kirkby, 1867. L. Carboniferous Limest., Carluke, Brockley, and Craigenglen.  
*Bairdia brevis*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 221.
- Bairdia ? Cambrica**, Brady, Crossk. & Robertson, 1874. Post-Tertiary, Cardiff.  
*Bairdia ? Cambrica*, Brady, Crossk. & Robertson, 1874, Mon. Pal. Soc. p. 139, pl. xiii. figs. 20, 21.
- Bairdia contracta**, Jones, 1856. Middle Eocene, Barton, Hampshire.  
*Bairdia contracta*, Jones, 1856, Mon. Pal. Soc. Tert. Entom. p. 53, pl. v. figs. 1a-c.
- Bairdia curta**, McCoy, 1844. Permian, Durham; Carboniferous L., Cork, Ireland.  
*Bairdia curta*, McCoy, 1844, Synopsis Carb. Foss. p. 165, pl. xxiii. fig. 6.  
*Cythere (Bairdia) curta*, Jones, 1850, in King's Mon. Perm. Foss. (Mon. Pal. Soc.) p. 61, pl. xviii. figs. 3a, 3b, 3c.  
*C. (Bairdia) plebeia*, var. *brevicauda*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, p. 161, pl. xi. figs. 9a, 9b, 9c.  
*Bairdia curta*, McCoy, Synop. Carb. Foss. Ireland, p. 64, t. xxiii. fig. 7; Jones, Perm. Foss. t. xviii. fig. 7. (*B. plebeia* is probably a synonym of *B. curta*, vide Messrs. Jones & Kirkby's remarks, Ann. & Mag. Nat. Hist. 1866, 3rd ser. vol. xviii. p. 42.)
- Bairdia ? ellipsoidea**, Jones, 1872. Lias, Yorkshire.  
*Bairdia ? ellipsoidea*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 146.
- Bairdia elongata**, sp., Münster, 1830. Permian, Durham; Carb. Shales, Campsie, near Glasgow.  
*Bairdia elongata*, sp., Münster, 1830, Jahrb. f. Min. p. 65, no. 19; Jones, 1850, in King's Monog. Perm. Foss. pl. xviii. fig. 5; Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 159, pl. xi. fig. 2.  
*B. elongata*, Jones & Kirkby, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xv. p. 408, pl. xx. figs. 14a to 14c.
- Bairdia grandis**, Jones & Kirkby, 1876. Carboniferous, Carluke.  
*Bairdia grandis*, Jones & Kirkby, 1876, Cat. West. Scot. Foss. p. 43.
- Bairdia Griffithiana**, Jones & Holl, 1868. Lower Silurian, Chair of Kildare, Ireland.  
*Bairdia Griffithiana*, Jones & Holl, 1868, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 58, pl. vii. figs. 10a, 10b.
- Bairdia Harrisiana**, Jones, 1849. Chalk, Gravesend, Charlton; Chalk-marl, Charing; Gault, Leacon Hill.  
*Bairdia Harrisiana*, Jones, 1849, Mon. Pal. Soc. Cret. Ent. p. 25, t. vi. figs. 17 a-f.

**Bairdia Hisingeri**, Münster, 1830. Permian, Durham; Carboniferous Limestone, Britain and Bavaria.

*Cythere Hisingeri*, Münster, 1830, Jahrb. f. Min. p. 65. no. 18; Jones & Kirkby, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xv. p. 408, pl. xx. figs. 12a-12c.

*Bairdia Schauerothiana*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 329, pl. x. fig. 14; 1859, Trans. Tynes. Nat. Club, vol. iv. p. 147, pl. ix. fig. 14, woodcut 10.

**Bairdia inflata**, Norman, 1862. Recent, Great Britain; Post-Tertiary, Scotland, Oban.

*Bairdia subdeltoidea*, A. White, 1857, Pop. Hist. Brit. Crust. p. 293.

*B. subdeltoidea*, narrow. var., Jones, 1849, Entom. Cretac. Form. of England, p. 23, and (1865) Tertiary Entom. p. 52.

*Cythere inflata*, Norman, 1862, Ann. & Mag. Nat. Hist. 3rd ser. vol. ix. p. 49, pl. iii. figs. 6-8.

*C. subdeltoidea*, Brit. Mus. Cat. Brit. Crust. p. 108.

*B. inflata*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 388, pl. xxvii. figs. 9-17, and pl. xxxviii. fig. 5; Brady, Crosskey, & Robertson, 1874, Mon. Pal. Soc. p. 139, pl. xv. figs. 1-4.

**Bairdia Kingii**, Reuss, 1854. Permian, Durham and Germany.

*Bairdia Kingii*, Reuss, 1854, Jahresbericht der Wetterau. Gesell. p. 67; Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 327, pl. x. fig. 8; Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 148, pl. ix. fig. 8, woodcut 11.

**Bairdia Kingii**, var. *compressa*, Kirkby, 1858. Permian, Durham.

*Bairdia plebeia*, var. *compressa*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 325, pl. x. fig. 7.

*B. Kingii*, var. *compressa*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 148, pl. ix. fig. 7.

**Bairdia mucronata**, Reuss, 1854. Carb. Limestone, Orchard, Craigenglen, Rob Royston.

*Bairdia mucronata*, Reuss, 1854, Jahresber. Wetterau. Gesellsch. p. 70; Jones & Kirkby, Trans. Geol. Soc. Glasgow, vol. ii. p. 222.

**Bairdia mucronata**, var. *submucronata*, *ibid.*

**Bairdia Murchisoniana**, Jones & Holl, 1868. Lower Silurian, Chair of Kildare, Ireland.

*Bairdia Murchisoniana*, Jones & Holl, 1868, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 58, pl. vii. figs. 9a, 9b.

**Bairdia Phillipsiana**, Jones & Holl, 1869. Wenlock L., Croft's Quarry, near West Malvern.

*Bairdia Phillipsiana*, Jones & Holl, 1869, Ann. & Mag. Nat. Hist. vol. iii. 4th ser. p. 213, pl. xiv. figs. 7 a, b, c.

**Bairdia plebeia**, Reuss, 1854. Permian, Durham; Carb. Shales, Campsie, near Glasgow.

*Cythere (Bairdia) curta*, Jones, 1850, in King's Monog. Perm. Foss. p. 61, tab. xvii. figs. 21, 22, tab. xviii. figs. 3 a, b, c.

*B. plebeia*, Reuss, 1854, Jahresb. Wetterau Gessell. p. 67, figs. 5a, 5b.

*Cythere (Bairdia) plebeia*, Kirkby & Jones, 1859, Trans. Tynes. Nat. Field-club, vol. iv. p. 141, pl. ix. figs. 1, 2, woodcuts 1*a*, 1*b*, 1*c*, and p. 161, pl. xi. fig. 8; J. W. Kirkby, 1862, Ann. & Mag. Nat. Hist. 3rd ser. vol. x. p. 203, pl. iv. figs. 5, 6, 9 (Carb. Sh.), pl. iv. figs. 7, 8, 10 (Permian).

**Bairdia plebeia**, var. *amygdalina*, Kirkby & Jones, 1859. Carboniferous Limestone, Ireland; Permian, Durham.

*Bairdia mucronata*?, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 327, pl. x. fig. 11.

*B. plebeia*, var. *amygdalina*, Kirkby & Jones, 1859, Trans. Tynes. Nat. Field-club, vol. iv. p. 145, pl. ix. fig. 11, woodcut 5.

**Bairdia plebeia**, var. *caudata*, Kirkby, 1859. Permian, Durham.

*Bairdia mucronata*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. pp. 327, 328, pl. x. figs. 9-10.

*B. plebeia*, var. *caudata*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 143, pl. ix. figs. 9, 10, & 12, and p. 168, pl. xi. figs. 17, 18*a-c*.

**Bairdia plebeia**, var. *elongata*, Kirkby, 1858. Carb. Limestone, Ireland; Permian, Durham.

*Bairdia plebeia*, var. *elongata*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 325, pl. x. figs. 4 & 4*a*; Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 145, pl. ix. fig. 4.

**Bairdia plebeia**, var. *grandis*, Kirkby & Jones, 1859. Permian, Durham.

*Cythere (Bairdia) curta*, Jones, 1850, in King's Perm. Foss., Mon. Pal. Soc. p. 64, pl. xvii. figs. 21 & 22.

*Cythere (Bairdia) plebeia*, var. *grandis*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, p. 162, pl. xi. figs. 13*a*, 13*b*.

**Bairdia plebeia**, var. *Neptuni*, Kirkby, 1858. Permian, Durham.

*Bairdia plebeia*, var. *Neptuni*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 325, pl. x. fig. 5; Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 145, pl. ix. fig. 5, woodcut 7.

**Bairdia plebeia**, var. *Reussiana*, Kirkby, 1858. Permian, Durham.

*Bairdia Reussiana*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 326, pl. x. fig. 6.

*B. plebeia*, var. *Reussiana*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 146, pl. ix. fig. 6, woodcut 8.

**Bairdia plebeia**, var. *rhombica*, Jones, 1859. Permian, Durham.

*Cythere (Bairdia) plebeia*, var. *rhombica*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, p. 162, pl. xi. figs. 10, 11, 12*a*, 12*b*.

**Bairdia plebeia**, var. *ventricosa*, Kirkby, 1858. Permian, Durham.

*Bairdia ventricosa*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 326, pl. x. fig. 3.

*Bairdia (Cythere?) plebeia*, var. *ventricosa*, Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 146, pl. x. fig. 3.

**Bairdia rhomboidea**, Kirkby, 1858. Permian, Durham.

*Bairdia rhomboidea*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 433, pl. xi. fig. 3; Kirkby & Jones, 1859, Trans. Tyneside Nat. Field-club, vol. iv. p. 149, pl. x. fig. 3.

**Bairdia Salteriana**, Jones & Holl, 1868. Lower Silurian, Chair of Kildare, Ireland.

*Bairdia Salteriana*, Jones & Holl, 1868, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 58, pl. vii. figs. 11a, 11b.

**Bairdia silicula**, Jones, 1849. Chalk-Marl, Charing.

*Bairdia silicula*, Jones, 1849, Mon. Pal. Soc., Cret. Entom. p. 27, t. vi. figs. 20 a-c.

**Bairdia subcylindrica**, Münster, sp., 1830. Carb. Limestone, Ireland; Permian Limestone, Sunderland.

*Cythere subcylindrica*, Münster, 1830, Jahrb. f. Min. p. 65. no. 21.

*Bairdia subcylindrica*, Jones & Kirkby, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xv. p. 409, pl. xx. figs. 13a, b.

*B. gracilis*, M'Coy, 1844, Synops. Carb. Foss. p. 64, t. xxiii. fig. 7; Jones, Perm. Foss. t. xviii. fig. 7; Jones & Kirkby, 1866, Ann. & Mag. Nat. Hist. 3rd ser. vol. xviii. p. 42.

**Bairdia subdeltoidea**, Münster, sp., 1830. Tertiary and Cretaceous, Britain, Europe.

*Cythere subdeltoidea*, Münster, 1830, Jahrb. f. Min. &c. p. 64; id. 1835, Neues Jahrb. f. Min. &c. p. 446.

*Cytherina subdeltoidea*, F. A. Roemer, 1839, Jahrb. f. Min. p. 517, t. vi. fig. 16.

*C. trigona*, Bosquet, Mém. Soc. Royale Liège, iv. p. 358, t. i. fig. 3.

*Bairdia subdeltoidea*, Bosquet, Mém. Couron. Acad. Belg. xxiv. p. 29, t. i. fig. 3;

id., 1854, Mém. C. C. Géol. Neerl. ii. p. 66, pl. viii. figs. 4a-f.

*Cythere (Bairdia) subdeltoidea*, Jones, Mon. Pal. Soc., Entomos. Cret. p. 23, t. 5. fig. 15; Jones, 1856, Mon. Pal. Soc., Tert. Entomos. p. 52, pl. iv. figs. 2a, 2b, 3, pl. vi. figs. 1a, 1b, 2.

**Bairdia triquetra**, Jones, 1849. Chalk, Gravesend; Greensand, Blackdown.

*Bairdia triquetra*, Jones, 1849, Mon. Pal. Soc., Cret. Entom. p. 27, t. vi. figs. 19 a-c.

### BEYRICHIA, M'Coy, 1850.

*Beyrichia*, M'Coy, 1852, Pal. Foss. p. 136; Jones, 1862, Mon. Pal. Soc. p. 120; Salter, 1866, Mém. Geol. Surv. vol. ii. pt. 1, p. 352, pl. i.

*Cythere*, M'Coy, 1844, Synopsis Carb. Foss. Irel. p. 165.

*Distribution.* Silurian and Coal-measures.

**Beyrichia affinis**, Jones, 1855. Caradoc, Tramore, Ireland.

*Beyrichia affinis*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 171.

**Beyrichia arcuata**, Bean, sp., 1836. Coal-measures, England; Upper Coal-measures, Scotland; "Millstone-grit" Shales, Lancashire; Lower Carbonif. Shales, Scotland.

*Beyrichia arcuata*, Bean, 1836, Ann. & Mag. Nat. Hist. vol. ix. p. 377. fig. 55.

**Beyrichia Barrandiana**, Jones, 1855. Lower Llandeilo, Mynydd-Garw, Beddgelert, N. Wales.

*Beyrichia Barrandiana*, Jones, 1855, Ann. & Mag. Nat. Hist. ser. 2, vol. xvi. p. 170, pl. vi. fig. 17.

**Beyrichia bituberculata**, McCoy, sp., 1844. Lower Carb. Yellow Sandstone, Cultra, Holywood.

*Cythere bituberculata*, McCoy, 1844, Syn. Carb. Foss. Irel. p. 165, pl. xxiii. fig. 10; Jones & Kirkby, 1866, Ann. & Mag. Nat. Hist. ser. 3, vol. xviii. p. 46; Jones, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 280.

**Beyrichia colliculus**?, D'Eichwald, Jones, 1867. Lower Carb., Carlisle.

*Beyrichia colliculus*?, Jones, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 280; id. 1876, Cat. West. Scot. Foss. p. 43.

**Beyrichia complicata**, Salter, 1866. Caradoc, Abermarchant; Llandeilo Rocks, S. Wales.

*Beyrichia complicata*, Salter, 1866, Mem. Geol. Surv. vol. ii. pt. 1, p. 352, pl. viii. fig. 16, & vol. iii. p. 295, pl. xix. fig. 9; Jones, 1855, Ann. & Mag. Nat. Hist. ser. 2, vol. xvi. p. 163, pl. vi. figs. 1-5.

**Beyrichia complicata**, var. *decorata*, Jones, 1855. Lower Silurian, Abermarchant.

*Beyrichia complanata*, var. *decorata*, Jones, 1855, Ann. & Mag. Nat. Hist. ser. 2, vol. xvi. p. 165, pl. vi. fig. 6.

**Beyrichia fastigiata**, Jones, 1867. Lower Carb. Series, Craigenglen,

*Beyrichia fastigiata*, Jones, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 280; id. 1876, Cat. West. Scot. Foss. p. 43.

**Beyrichia gibba**, Salter, 1848. Llandeilo Slate-Mill, Marloes District.

*Beyrichia gibba*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 352, pl. viii. figs. 17 & 18.

**Beyrichia impendens**, Jones, 1870. Upper Silurian, Pentland Hills.

*Beyrichia impendens*, Jones, 1870, Pal. Biv. Entom., Proc. Geol. Assoc. p. 11, & p. 13. figs. 4 a & 4 b.

**Beyrichia Jonesii**, Boll, 1856. Upper Silurian, Malvern, Gotland, Germany, and N. America.

*Beyrichia Jonesii*, Boll, 1856, Zeitsch. d. geol. Gesell. viii. p. 322, figs. 1 & 2; Jones, 1870, Pal. Biv. Entom., Proc. Geol. Assoc. p. 12 & 15, fig. 17.

**Beyrichia Klødeni**, M'Coy, 1846.Caradoc to Upper Ludlow,  
England and Wales.

*Beyrichia Klødeni*, M'Coy, 1846, Synops. Sil. Foss. p. 58, woodcut; id. 1851, Brit. Pal. Foss. Camb. p. 135, pl. i. E. fig. 2; Jones, 1855, Ann. & Mag. Nat. Hist. ser. 2, vol. xvi. p. 166, pl. vi. figs. 7-9; id. 1870, Pal. Biv. Entom. (Proc. Geol. Assoc.) pp. 11 & 14, figs. 6 a & 6 b.

*Agnostus tuberculatus*, Salter, 1839, Sil. Syst. p. 604, pl. iii. fig. 17.

*Beyrichia tuberculatus*, Salter, 1848, Mem. Geol. Surv. vol. ii. pt. 1, p. 352, pl. viii. figs. 14, 15.

*B. gibba*, id. ib. pl. viii. figs. 16, 17.

*B. tuberculata*, id. 1854, Siluria, p. 234 (woodcut 45. fig. 4), pl. xxxiv. f. 21.

**Beyrichia Klødeni**, var. *antiquata*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 167, pl. vi. fig. 8; id. 1870, Pal. Biv. Entom., Geol. Assoc. pp. 12 & 14, fig. 7.

**Beyrichia Klødeni**, var. *intermedia*, Jones, 1870, ib. pp. 12 & 14, fig. 9.

**Beyrichia Klødeni**, var. *pauperata*, Jones, 1870, ib. pp. 12 & 14, fig. 8.

**Beyrichia Klødeni**, var. *subtorosa*, Jones, 1870, ib. pp. 12 & 14, figs. 10 a, b.

**Beyrichia Klødeni**, var. *torosa*, Jones, 1855, *op. cit. supra*, p. 167, pl. vi. figs. 10-12; 1870, *op. cit. supra*, pp. 12 & 14, figs. 11 a, b.

**Beyrichia Maccoyiana**, Jones, 1869.Upp. Sil. Limest., Malvern,  
Germany, and N. America.

*Beyrichia Maccoyiana*, Jones, 1869, Proc. Geol. Assoc. pp. 12, 15, fig. 18.

**Beyrichia multiloba**, Jones, 1867.Lower. Carb. Series, Boghead,  
Hamilton, Craigenglen.

*Beyrichia multiloba*, Jones, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 280; id. 1876, Cat. West. Scot. Foss. p. 43.

**Beyrichia radiata**, Jones & Kirkby, 1867.Carboniferous Series,  
Robroyton, Orchard.

*Beyrichia radiata*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 280; id. 1876, Cat. West. Scot. Foss. p. 43.

**Beyrichia rigida**, Jones & Kirkby, 1867. Carboniferous Series, Orchard.

*Beyrichia rigida*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 280; id. 1876, Cat. West. Scot. Foss. p. 43.

**Beyrichia subarcuata**, Jones, 1862.Lower Carb. Limestone Shales,  
Lower Coal-measures, Upper Coal-measures,  
Astley, Lancashire.

*Beyrichia subarcuata*, Jones, 1862, Mon. Pal. Soc., Foss. Estherie, App. p. 120, pl. v. figs. 16, 17.



**Beyrichia Wilckensiana**, Jones, 1855.

Ludlow Beds, Caradoc,  
Horderley, Shropshire.

*Beyrichia Wilckensiana*, Jones, 1855, Ann. & Mag. Nat. Hist. ser. 2, vol. xvi.  
p. 89.

**BOSQUETIA**, Brady, Crossk., & Robertson, 1874.

*Bosquetia*, Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 220.

*Distribution.* Post-Tertiary.

**Bosquetia robusta**, Brady, Crossk., & Robertson, 1874. Post-Tertiary,  
Scotland.

*Bosquetia robusta*, Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 220,  
pl. xii. figs. 18-21.

**BRADYCINETUS**, Jones & Kirkby, 1867.

*Bradycinetus*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 218.

*Distribution.* Carboniferous Limestone.

**Bradycinetus Rankinianus**, Jones & Kirkby, 1867. Carb. Limestone,  
Carlisle.

*Bradycinetus Rankinianus*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow,  
vol. ii. p. 218, & 1871, vol. iii. Suppl. p. 27; id. 1874, Mon. Pal. Soc. p. 42,  
pl. ii. figs. 21, 22 a-c, pl. v. fig. 5.

**BYTHOCY THERE**, G. O. Sars, 1865.

*Bythocythere*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 86; Brady, 1868,  
Mon. Rec. Brit. Ostrac. p. 450; Brady, Crossk., & Robertson, 1874, Mon.  
Pal. Soc. p. 208.

*Cythere*, Norman, 1865, Nat.-Hist. Trans. Northumb. & Durh. vol. i. p. 17.

*Jonesia*, Brady, 1865, Zool. Trans. vol. v. p. 363.

*Distribution.* Post-Tertiary. Recent, Marine.

**Bythocythere constricta**, G. O. Sars, 1865. Post-Tertiary, Scotland;  
Recent, Great Britain, Ireland, Channel Islands.

*Bythocythere constricta*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 85; Brady,  
1868, Mon. Rec. Brit. Ostrac. p. 451, pl. xxxv. figs. 47-52; Brady, Crossk.,  
& Robertson, 1874, Mon. Pal. Soc. p. 208, pl. xvi. figs. 6-10.

**Bythocythere elongata**, Brady, Crossk., and Robertson, 1874. Post-  
Tertiary, Girvan.

*Bythocythere elongata*, Brady, Crossk., & Robertson, Mon. Pal. Soc. p. 209,  
pl. ii. figs. 4, 5.

**Bythocythere simplex**, Norman, 1865. Post-Tertiary, Scotland and Ire-  
land; Recent, Britain, Norway, Baffin's Bay.

*Cythere simplex*, Norman, 1865, Nat.-Hist. Trans. Northumb. & Durham, vol. i.  
p. 17, pl. v. figs. 1-4.

*Bythocythere acuminata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 86.

*Jonesia simplex*, Brady, 1865, Zool. Trans. vol. v. p. 363, pl. lvii. figs. 11 a-c.

*Bythocythere simplex*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 450, pl. xxxiii.  
figs. 23-27, pl. xl. fig. 8; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc.  
p. 208, pl. vii. figs. 20, 21.

**CANDONA, Baird, 1846.**

*Cypris*, Baird, 1835, Trans. Berw. Nat. Club, i. p. 100; Koch, 1837, Deutsch. Crust. Heft xi.

*Candona*, Baird, 1845, Trans. Berw. Nat. Club, ii. p. 153; Jones, 1850, Ann. & Mag. Nat. Hist. ser. 2, vol. vi. p. 27.

*Distribution.* Carboniferous, Pleistocene, Post-Tertiary. Recent, Freshwater.

***Candona albicans*, Brady, 1864.** Post-Tertiary, Hornsea, Whittlesea; Recent, England.

*Candona albicans*, Brady, 1864, Ann. & Mag. Nat. Hist. vol. xiii. p. 61, pl. iv. figs. 6-10; id. Trans. Tynes. Nat. F.-C. vol. vi. p. 107, pl. iii. figs. 6-10; id. 1868, Mon. Rec. Brit. Ostrac. p. 381, pl. xxv. figs. 20-25, & pl. xxxvi. fig. 12; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 133, pl. i. figs. 10-13.

***Candona candida*, Müller, 1785.** Post-Tertiary, England and Scotland; Recent, Great Britain, Europe.

*Cypris candida*, Müller, 1785, Entomostraca, p. 62, tab. vi. figs. 7-9.

*Monoculus candidus*, Jurine, 1820, Hist. des Monocles, p. 176, pl. xix. figs. 7, 8.

*Candona lucens*, Baird, 1850, Brit. Entom. p. 160, tab. xix. fig. 1.

*C. candida*, Lilljeborg, 1853, De Crustaceis &c. p. 127, t. ii. figs. 19, 20, t. xxv. figs. 13-15; Jones, 1856, Tert. Entom. p. 19, pl. i. figs. 8a-8f, 5a, 5b; Brady, 1868, Mon. Rec. Brit. Ostrac. p. 383, pl. xxv. figs. 1-9, pl. xxxvi. fig. 13, & pl. xxxvii. fig. 1; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 135, pl. ii. figs. 29, 30.

***Candona compressa*, Koch, sp., 1837.** Post-Tertiary, Berks; Peat-deposits, Cambridgeshire; Recent, Britain and Europe.

*Candona compressa*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 382, pl. xxvi. figs. 22-27; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 135, pl. ii. figs. 10, 11.

*Cypris compressa*, Koch, 1839, Deutschl. Crust. Heft xxi. pl. xvii.

*C. setigera*, Jones, Ann. & Mag. Nat. Hist. ser. 2, vol. vi. p. 25, t. iii. figs. 3a-c; id. 1856, Mon. Pal. Soc. Tert. Entom. p. 12, pl. i. figs. 6a-d.

***Candona detecta*, Müller, 1785.** Post-Tertiary, Branston Fen; Recent, England, Germany.

*Cypris detecta*, Müller, 1785, Entomostraca, p. 49, tab. iii. figs. 1-3.

*Candona detecta*, Baird, 1850, Brit. Entom. p. 161; id. 1868, Mon. Rec. Brit. Ostrac. p. 384, pl. xxiv. figs. 35-38, & pl. xxxvii. fig. 2; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 131, pl. i. figs. 7-9.

***Candona? Forbesii*, Jones, 1856.** Upper Eocene, Isle of Wight, Hampshire.

*Candona? Forbesii*, Jones, 1856, Mem. Geol. Surv. p. 157, pl. vii. fig. 22; id. 1856, Tert. Entom., Mon. Pal. Soc. p. 18, pl. iv. figs. 8, 9, 11a, 11b; id. 1862, Memoir 10, Geol. Surv. I. of Wight, p. 94, fig. 70.

***Candona? globosa*, Duff, sp., 1842.** Carboniferous, Moray, Scotland.

*Cypris globosa*, Duff, 1842, Geol. of Moray, p. 16.

*Candona globosa*, Jones, 1862, Mon. Pal. Soc., Foss. Estheriæ, App. p. 126, pl. v. figs. 23, 24.

**Candona lactea**, Baird, 1850. Post-Tertiary, Great Britain and Ireland ;  
Recent, Holland, Britain, Ireland.

*Candona lactea*, Baird, 1850, Proc. Zool. Soc. Lond. p. 255, pl. xviii. figs. 25-27 ;  
Brady, 1868, Mon. Rec. Brit. Ostrac. p. 382, pl. xxiv. figs. 55-58 ; Brady,  
Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 134, pl. i. figs. 14-16.

**Candona ? Richardisoni**, Jones, 1854. Lower Eocene, Woolwich.

*Candona ? Richardisoni*, Jones, 1854, Quart. Journ. Geol. Soc. vol. x. p. 162,  
pl. iii. figs. 13 ; id. 1856, Tert. Entom., Mon. Pal. Soc. p. 18, pl. iv. figs. 12*a*, 12*b*.

**Candona Salteriana**, Jones, 1862. Carboniferous Shale, Bradford  
Pit, Manchester.

*Candona Salteriana*, Jones, 1862, Mon. Pal. Soc., Foss. Estheriæ, App. p. 122,  
pl. v. figs. 13, 14.

**Candona ? subæqualis**, Jones, 1856. Post-Tertiary, Essex.

*Candona ? subæqualis*, Jones, 1856, Mon. Pal. Soc. Tert. Entom. p. 20, pl. i.  
figs. 9*a-c*.

**Candona Tateana**, Jones, 1862. Carboniferous, Lammerton,  
Berwickshire.

*Candona Tateana*, Jones, 1862, Mon. Pal. Soc., Foss. Estheriæ, App. p. 123,  
pl. v. fig. 15.

### CARBONIA, Jones, 1870.

*Carbonia*, Jones, 1870, Geol. Mag. vol. vii. p. 218.

*Distribution.* Carboniferous.

**Carbonia Agnes**, Jones, 1870. Carboniferous Shales, S. Wales.

*Carbonia Agnes*, Jones, 1870, Geol. Mag. vol. vii. p. 218, pl. ix. figs. 6, 7.

**Carbonia Agnes**, var. *α. subrugulosa*, Jones, Geol. Mag. vol. vii. p. 218,  
pl. ix. fig. 10.

**Carbonia Agnes**, var. *β. rugulosa*, id. ib. p. 218, pl. ix. figs. 8, 9.

**Carbonia Carlottæ**, Jones & Kirkby, 1867. Carboniferous, Boghead,  
Hamilton, Gillfoot.

*Carbonia Carlottæ*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii.  
p. 217 ; id. 1876, Cat. West. Scot. Foss. p. 44.

**Carbonia Evelinæ**, Jones, 1870. Carboniferous Shale, S. Wales.

*Carbonia Evelinæ*, Jones, 1870, Geol. Mag. vol. vii. p. 218, pl. ix. fig. 4.

**Carbonia fabulina**, Jones & Kirkby, 1867. Carboniferous Shale,  
S. Wales.

*Cytheria ? fabulina*, Jones & Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii.  
pp. 217, 222 ; Jones, 1870, Geol. Mag. vol. vii. p. 218.

**Carbonia**, sp., Jones, 1870.

Carboniferous Shale, S. Wales.

*Carbonia*, sp., Jones, 1870, Geol. Mag. vol. vii. p. 219, pl. ix. fig. 5.

### **CYPRELLA**, De Koninck, 1841.

*Cyprella*, De Koninck, 1841, Mém. Acad. Belg. vol. xiv. p. 18; Jones and Kirkby, 1864, N. Jahrb. p. 54.

*Cythere*, Dupont, 1863, Bullet. Acad. Belg. ser. 2, vol. xv. p. 110.

*Distribution*. Carboniferous.

***Cyprella annulata***, De Koninck, 1841. Carboniferous Limestone, Settle, Cork; Linlithgowshire; Belgium.

*Cyprella annulata*, De Kon. 1841, Mém. Acad. Roy. Belg. vol. xiv. p. 18, fig. 8; id. 1843, D'Omalus's Précis élém. Géol. p. 515; id. 1844, Desc. Anim. foss. Terr. Carbonif. Belg. p. 588, pl. lii. figs. 3 *a*, *b*; Jones and Kirkby, 1864, N. Jahrb. p. 54; id. 1864, Canad. Nat. Geol. (June), p. 237; id. 1874, Mon. Pal. Soc. p. 40, pl. iv. figs. 12 *a*, *b*, 13 *a*, *b*, 17 *a*, *b*, *c*.

*Cythere annulata*, Dupont, 1863, Bullet. Acad. Roy. Belg. ser. 2, vol. xv. p. 110.

***Cyprella chrysalidea***, De Koninck, 1841. Carboniferous Limestone, Little Island, Cork; Settle, Yorkshire; Belgium.

*Cyprella chrysalidea*, De Kon. 1841, Mém. Acad. Roy. Belg. vol. xiv. p. 19, fig. 7; id. 1843, in D'Omalus' Précis élém. Géol. p. 515; id. 1844, Desc. Anim. foss. Terr. Carb. Belg. p. 589, pl. lii. figs. 6 *a-c*; Dupont, 1863, Bull. Acad. Roy. Belg. ser. 2, vol. xv. p. 110; Jones and Kirkby, 1864, N. Jahrb. p. 54; id. Canad. Nat. Geol. (June 1864), p. 237; id. 1874, Mon. Pal. Soc. p. 38, pl. iv. figs. 10 *a-c*, 11 *a-c*, 14 *a*, *b*, 15, 16 *a-c*, 18 *a*, *b*, including var. *subannulata*, Jones, 1870, M. Microsc. Journ. vol. iv. p. 185, p. 61, fig. 10.

### **CYPRIDEA**, Bosquet, 1852.

Subgenus of *Cypris*, Jones, 1856, Mon. Pal. Soc., Tert. Entom. p. 47.

*Cypris* auct.

*Distribution*. Purbeck and Wealden.

***Cypridea fasciculata***, E. Forbes, 1850.

Purbeck, Dorsetshire.

*Cypridea* (*Cypris*) *fasciculata*, E. Forbes, 1850, Brit. Assoc. Report, Edinb.; id. 1855, Lyell's Elements, p. 295, fig. 337 *b*.

***Cypridea Fittoni***, Mantell, sp., 1854. Wealden, Langton Green, Sussex.

*Cypris Fittoni*, Mant. 1854, Medals of Creation, p. 530, fig. 2.

*Cypridea Fittoni*, Morris, 1854, Cat. Brit. Foss. p. 104.

***Cypridea gibbosa***, E. Forbes, 1850.

Purbeck, Dorsetshire.

*Cypridea* (*Cypris*) *gibbosa*, E. Forbes, 1850, Brit. Assoc. Report, Edinb.; id. 1855, in Lyell's Elements, p. 294, fig. 334 *a*.

***Cypridea granulosa***, Sby. sp., 1829.

Wealden, Tilgate Forest;  
Purbeck, Vale of Wardour, Kent.

*Cypris granulosa*, Sowerby, 1829, Trans. Geol. Soc. 2nd ser. vol. iv. pl. xxi. fig. 4; Mant. 1854, Medals of Creation, p. 530, fig. 4.

*Cypridea granulosa*, Morris, 1854, Cat. Brit. Foss. p. 104.

*Cypris granulata*, Sowerby, 1855, in Lyell's Elements, p. 295, fig. 337 *c*.

- Cypridea leguminella**, E. Forbes, 1850. Purbeck, Dorsetshire.  
*Cypridea (Cypris) leguminella*, E. Forbes, 1850, Brit. Assoc. Report, Edinb.; id. 1855, Lyell's Elements, p. 294, fig. 334 c.
- Cypridea punctata**, E. Forbes, 1850. Purbeck, Dorsetshire.  
*Cypridea (Cypris) punctata*, E. Forbes, 1850, Brit. Assoc. Report, Edinb.; id. 1855, Lyell's Elements, p. 297, fig. 339 b.
- Cypridea Purbeckensis**, E. Forbes, 1850. Purbeck, Dorsetshire.  
*Cypridea (Cypris) Purbeckensis*, E. Forbes, 1850, Brit. Assoc. Report, Edinb.; id. 1855, Lyell's Elements, p. 297, fig. 339 a.
- Cypridea spinigera**, Sby. 1829. Wealden, Sandown and Atherfield, Isle of Wight.  
*Cypris spinigera*, Sowerby, 1829, Trans. Geol. Soc. 2nd ser. vol. iv. pl. xxi. fig. 3; Mant. 1854, Medals of Creation, p. 530.  
*Cypridea spinigera*, Morris, 1854, Cat. Brit. Foss. p. 104.
- Cypridea striato-punctata**, E. Forbes, 1850. Purbeck, Dorsetshire.  
*Cypridea (Cythere) striato-punctata*, E. Forbes, 1850, Brit. Assoc. Report, Edinb.; id. 1855, Lyell's Elements, p. 295, fig. 337 a.
- Cypridea tuberculata**, Sby. 1829. Wealden and Purbeck, Sandown Bay and Atherfield, Isle of Wight; Langton Green, Sussex.  
*Cypris tuberculata*, Sowerby, 1829, Trans. Geol. Soc. 2nd ser. vol. iv. pl. xxi. fig. 2; Dunker, Nordd. Weald. t. xiii. fig. 30; Mant. 1854, Medals of Creation, p. 527, fig. 3; E. Forbes, 1855, in Lyell's Elements, p. 294, fig. 334 b.  
*Cypridea tuberculata*, Morris, 1854, Cat. Brit. Foss. p. 104.
- Cypridea Valdensis**, Sby., sp., 1829. Wealden and Purbeck Beds, England.  
*Cypris faba*, Sowerby, Annals Philos. 1824, vol. viii. p. 376.  
*Cypris Valdensis*, Sowerby, 1829, Trans. Geol. Soc. 2nd ser. vol. iv. pp. 177 & 344, pl. xxi. fig. 1; Mant. 1854, Medals of Creation, p. 529, fig. 1.  
*Cypridea Valdensis*, Jones, 1862, Mon. Pal. Soc., Foss. Estheriæ, p. 127, pl. v. figs. 26-30.

### CYPRIDELLA, De Koninck, 1844.

- Cypridina*, De Kon. 1841, Mém. Acad. Roy. Belg. vol. xiv. p. 17.  
*Cypridella*, De Kon. 1844, Descript. Anim. foss. Terr. Carb. Belg. p. 287; Jones and Kirkby, 1864, Canad. Nat. & Geol. June, p. 237.
- Distribution.* Carboniferous.
- Cypridella cruciata**, De Kon. 1844. Carb. Limestone, Settle, Longnor, Derbyshire (*vide* Jones); Visé, Belgium.  
*Cypridella cruciata*, De Kon. 1844, Descript. Anim. foss. Terr. Carb. Belg. p. 590, pl. lii. figs. 7 a-c; Jones and Kirkby, 1866, Ann. & Mag. Nat. Hist. 3rd ser. vol. xviii. p. 38.
- Cypridella cyprelloides**, Jones and Kirkby, 1874. Carboniferous Limestone, Cork, Ireland.  
*Cypridella cyprelloides*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 36, pl. iv. figs. 9 a-c.

- Cypridella Edwardsiana**, De Koninek, 1841. Carboniferous Limestone, Ireland, Scotland, Belgium.  
*Cypridina Edwardsiana*, De Kon. 1841, Mém. Acad. Roy. Belg. vol. xiv. p. 17, fig. 9; id. 1843, D'Omalus Précis élém. Géol. p. 515; 1844, Descript. Anim. foss. Terr. Carb. Belgique, p. 287, pl. lii. figs. 2 *a-d*.  
*Cythere Edwardsiana*, Dupont, 1863, Bullet. Acad. Roy. Belg. 2<sup>e</sup> sér. vol. xv. p. 110.  
*Cypridella Edwardsiana*, Jones and Kirkby, 1864, Canad. Nat. & Geol. (June), p. 237; id. 1864, N. Jahrb. p. 45; id. 1874, Mon. Pal. Soc. p. 32, pl. iv. figs. 4 *a-c*, pl. v. figs. 11 *a-e*.

- Cypridella Koninckiana**, Jones, 1870. Carboniferous Limestone, Little Island, Cork.  
*Cypridella Koninckiana*, Jones, 1870, Month. Micr. Journ. vol. iv. p. 185, pl. lxi. fig. 9; Jones and Kirkby, 1874, Mon. Pal. Soc. p. 34, pl. iii. figs. 14 *a-c*, 16 *a, b*, and 17 *a-d*.

- Cypridella obsoleta**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridella obsoleta*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 34, pl. iii. figs. 12 *a-c*.

- Cypridella Wrightii**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork, and Visé, Belgium.  
*Cypridella Wrightii*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 34, pl. iv. figs. 1 *a-c*.

### **CYPRIDELLINA**, Jones and Kirkby, 1874.

- Cypridellina*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 25.  
*Distribution*. Carboniferous Limestone.

- Cypridellina alta**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridellina alta*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 31, pl. iii. figs. 15 *a, b*.

- Cypridellina Burrovii**, Jones and Kirkby, 1874. Carboniferous Limestone, Settle, Yorkshire.  
*Cypridellina Burrovii*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 27, pl. iii. figs. 4 *a-e*, 5 *a-c*, 21 *a-e*.

- Cypridellina Burrovii**, var. *Longnoriensis*, Jones and Kirkby, 1874. Carb. Limestone, Longnor, Derbyshire.  
*Cypridellina Burrovii*, var. *longnoriensis*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 28, pl. iii. fig. 8.

- Cypridellina clausa**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridellina clausa*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 27, pl. iii. figs. 2 *a, b, c*.

- Cypridellina elongata**, var. *Hibernica*, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridellina elongata*, var. *Hibernica*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 29, pl. iii. figs. 9 *a-c*. (*Cypridellina elongata*, Jones and Kirkby, 1874, is from Visé, Belgium.)

- Cypridellina galea**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridellina galea*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 30, pl. iv. figs. 3 a-c.
- Cypridellina intermedia**, Jones and Kirkby, 1874. Carboniferous Limestone, Bathgate, Linlithgowshire.  
*Cypridellina intermedia*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 29, pl. v. figs. 8, a, b, c.
- Cypridellina vomer**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridellina vomer*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 30, pl. iii. figs. 7 a-c.
- Cypridellina vomer**, var. *cultrata*, id. *ibid.* figs. 16 a-c.
- Cypridellina vomer**, var. *uncinata*, id. *ibid.*

### CYPRIDINA, Milne-Edwards, 1838.

- Daphnoidia*, Hibbert, 1834, Trans. Roy. Soc. Edinb. vol. xiii. p. 180.  
*Cypridina*, M.-Edwards, 1838, Lamarek. Hist. Nat. An. s. Vert. 2nd edit. p. 178; Baird, 1840, Ann. & Mag. Nat. Hist. 2nd ser. vol. i. p. 21; Dana, 1855, U.S. Expl. Exped. Crust. p. 1291; Brady, 1866, Trans. Zool. Soc. vol. v. p. 386; Jones and Kirkby, 1866, Ann. & Mag. Nat. Hist. 3rd ser. vol. xviii. p. 41; G. O. Sars, 1869, Nye Dybvands-Crustaceer fra Lofoten.  
*Asterope*, Philippi, 1840, Ann. & Mag. Nat. Hist. vol. vi.  
*Daphnia*, McCoy, 1844, Synop. Char. Carb. Foss. Irel. p. 164.  
*Cyprella*, Bosquet, 1847, Entomost. de la Craie de Maestricht.
- Distribution.* Carboniferous. Recent, marine.
- Cypridina Bradyana**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridina Bradyana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 15, pl. ii. figs. 13, a, b, c.
- Cypridina brevimentum**, Jones and Kirkby, 1874. Carboniferous Limestone, England, Ireland, Belgium.  
*Cypridina brevimentum*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 15, pl. ii. figs. 15-19.
- Cypridina Grossartiana**, Jones and Kirkby, 1867. Carboniferous Limestone, Lanarkshire.  
*Cypridina Grossartiana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 218, and vol. iii. Suppl. p. 27, 1871; id. 1874, Mon. Pal. Soc. p. 17, pl. ii. figs. 20, a, b, c.
- Cypridina Hunteriana**, Jones and Kirkby, 1874. Carboniferous Limestone, Braidwood, Carlisle.  
*Cypridina Hunteriana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 18, pl. v. figs. 3, a, b, c.
- Cypridina oblonga**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridina oblonga*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 20, pl. v. figs. 12 a-c.

- Cypridina Phillipsiana**, Jones, 1870. Carboniferous Limestone, Glasgow, Ireland, Belgium.  
*Cypridina Phillipsiana*, Jones, 1870, Monthly Microsc. Journ. vol. iv. p. 185, pl. lxi. figs. 8 a, b; Jones and Kirkby, 1871, Trans. Geol. Soc. Glasgow, vol. iii. Suppl. p. 29; id. Mon. Pal. Soc. p. 18, pl. ii. figs. 4, 5, 9.
- Cypridina primæva**, M'Coy, 1844. Coal-measures, Carlisle: Permian Limestone, Sunderland.  
*Duplinia primæva*, M'Coy, 1844, Synops. Char. Carb. Foss. Ireland, p. 164, pl. xxiii. fig. 5.  
*Cypridina primæva*, Jones, 1854, in Morris's Catal. Brit. Foss. 2nd ed. p. 104; Jones and Kirkby, 1866, Ann. & Mag. Nat. Hist. ser. 3, vol. xviii. p. 41; id. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 218, and vol. iii. Suppl. 1871, p. 27; id. 1874, Mon. Pal. Soc. p. 12, pl. ii. figs. 24, 25, 26, 27 a-c, 28.
- Cypridina pruniformis**, Jones and Kirkby, 1874. Carboniferous Limestone, Limerick, and Visé, Belgium.  
*Cypridina pruniformis*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 19, pl. v. figs. 9, a, b, c.
- Cypridina radiata**, Jones and Kirkby, 1874. Coal-measures, Glasgow, North Staffordshire.  
*Cypridina radiata*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 14, pl. v. figs. 6 a-f.
- Cypridina Rankiniana**, Jones and Kirkby, 1867. Coal-measures, Gare, Carlisle.  
*Cypridina Rankiniana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 218.
- Cypridina scoriacea**, Jones and Kirkby, 1874. Carboniferous Limestone, Carlisle.  
*Cypridina scoriacea*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 20, pl. ii. figs. 3 a-d.
- Cypridina Thomsoniana**, Jones and Kirkby, 1867. Coal-measures, Gare, Carlisle.  
*Cypridina Thomsoniana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 218, and vol. iii. Suppl. 1871, p. 27; id. 1874, Mon. Pal. Soc. p. 19, pl. ii. figs. 8 a-c, pl. v. fig. 4.
- Cypridina Wrightiana**, Jones and Kirkby, 1874. Carboniferous Limestone, Cork, Ireland.  
*Cypridina Wrightiana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 14, pl. ii. figs. 14, a, b, c.
- Cypridina Youngiana**, Jones and Kirkby, 1874. Coal-measures, Gare, Carlisle.  
*Cypridina Youngiana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 17, pl. ii. figs. 11 a-c.

#### CYPRIDINELLA, Jones and Kirkby, 1874.

- Cypridinella*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 21.  
*Distribution.* Carboniferous Limestone.



- Cypridinella clausa**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island and Middleton, Cork.  
*Cypridinella clausa*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 23, pl. iii. figs. 3 a-c.
- Cypridinella Cummingii**, Jones and Kirkby, 1874. Carboniferous Limestone, Isle of Man.  
*Cypridinella Cummingii*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 21, pl. ii. figs. 23 a-c.
- Cypridinella Maccoyiana**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridinella Maccoyiana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 24, pl. iii. figs. 13, a, b.
- Cypridinella superciliosa**, Jones and Kirkby, 1874. Carboniferous Limestone, Cork, Linlithgowshire, Settle, Yorkshire.  
*Cypridinella superciliosa*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 22, pl. ii. figs. 7 a-c, pl. v. figs. 7 a-d.
- Cypridinella vomer**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.  
*Cypridinella vomer*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 25, pl. iii. figs. 11 a-c.

### CYPRIDOPSIS, Brady, 1869.

- Cypridopsis*, Brady, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 364.  
*Distribution*. Post-Tertiary; Recent.
- Cypridopsis? Newtoni**, Brady and Robertson, 1870. Post-Tertiary, Whittlesea; Recent, Anglican Fen District.  
*Cypridopsis? Newtoni*, Brady and Robertson, 1870, Ann. & Mag. Nat. Hist. ser. 4, vol. vi. p. 14, pl. vii. figs. 14-16; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 129, pl. ii. figs. 20, 21.
- Cypridopsis obesa**, Brady and Robertson, 1869. Post-Tertiary, Hornsea, Branston Fen; Recent, Britain, Ireland, Holland.  
*Cypridopsis obesa*, Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 364, pl. xviii. figs. 5-7, and (1870) vol. vi. p. 19; id. 1874, Mon. Pal. Soc. p. 128, pl. i. figs. 1-4.

### CYPRIS, Müller, 1776.

- Cypris*, Müller, 1776, Zool. Dan. Prod. no. 2384, Entomostraca 55; Latreille, Nat. Hist. Crust. iv. 245; M.-Edwards, Nat. Hist. Crust. iii. 399; Zaddach, 1844, Synop. Crust. Pruss. Prod. p. 35; Baird, 1850, Brit. Entom. p. 151; Jones, 1850, Ann. & Mag. Nat. Hist. 2nd ser. vol. vi. p. 25; S. Fischer, 1851, Ueber das Genus *Cypris* &c. p. 163; Liljeborg, 1853, De Crustaceis &c. p. 113; Zenker, 1854, Mon. der Ostracoden. p. 79; *Monoculus*, Linnaeus, 1746, Syst. Nat.; Manuel, 1792, Enc. Méth. vii. p. 726; Jurine, 1820, Hist. Nat. Monoc. p. 175.
- Distribution*. Pleistocene and Post-Tertiary. Recent, freshwater, England, Europe.

- Cypris Browniana**, Jones, 1850. Pleistocene, Clacton, Essex.  
*Cypris Browniana*, Jones, 1850, Ann. & Mag. Nat. Hist. 2nd ser. vol. vi. p. 25, pl. 3. fig. 1; id. 1856, Mon. Pal. Soc., Tertiary Entomos. p. 13, pl. i. figs. 1 a-d.
- Cypris Browniana**, var. **tumida**, Jones, 1850. Pleistocene, Grays, Essex.  
*Cypris tumida*, Jones, 1850, Ann. & Mag. Nat. Hist. 2nd ser. vol. vi. p. 26, pl. 3. fig. 2; id. Mon. Pal. Soc., Tertiary Entomos. p. 13.
- Cypris cinerea**, Brady, 1868. Post-Tertiary, Crofthead, Scotland; Recent, Yorkshire moors.  
*Cypris cinerea*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 374, pl. xxiv. figs. 39-42, and pl. xxxvi. fig. 7; id. 1874, Mon. Pal. Soc. p. 126, pl. ii. figs. 6, 7.
- Cypris compressa**, Baird, 1835. Post-Tertiary, England, Hornsea, Branston Fen; Scotland, Dipple. Recent, Britain, Switzerland, Germany, Tyrol.  
*Cypris compressa*, Baird, 1835, Trans. Berw. Nat. Club, vol. i. p. 100, t. iii. fig. 16; id. 1850, Brit. Entom. p. 154, t. xix. figs. 14 a-c; Lilljeborg, 1853, De Crustaceis, p. 112, t. x. figs. 16-18; Brady, 1868, Mon. Rec. Brit. Ostrac. p. 372, pl. xxiv. figs. 1-5, and pl. xxxvi. fig. 6.  
*C. (Cypris) punctata*, Zenker, 1854, Anat. syst. Studien, p. 77, Taf. 3 A.  
*C. compressa*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 123, pl. i. figs. 5, 6.
- Cypris gibba**, Ramdohr, 1808. Post-Tertiary, England and Scotland; Recent, Great Britain, Holland, Germany.  
*Cypris gibba*, Ramdohr, 1808, Magaz. d. Gesellsch. naturforsch. Freunde zu Berlin, vol. ii. p. 91, t. iii. figs. 13-17; Jones, 1856, Mon. Tert. Entom. p. 15, pl. i. figs. 3 a f. and woodcut fig. 1, p. 16; Brady, 1868, Mon. Rec. Brit. Ostr. p. 369, pl. xxiv. figs. 47-54, and pl. xxxvi. fig. 2.  
? *Cytherina expansa*, Reuss, 1850, Haidinger's Abhandl., Band iii. p. 60, Taf. ix. fig. 11.  
*Cypris gibba*, Brady, 1874, Mon. Pal. Soc. p. 127, pl. xv. figs. 5, 6.
- Cypris lævis**, Müller, 1785. Post-Tertiary, Cambridgeshire, Dipple, Scotland; Recent, Great Britain, Denmark, Germany.  
*Cypris lævis*, Müller, 1785, Entom. p. 52, t. iii. figs. 7-9.  
*C. ? pantherina*, Fischer, 1851, Ueber das Genus *Cypris*, p. 163, t. xi. figs. 6-8.  
*C. ovum*, Lilljeborg, 1853, De Crustaceis, p. 113, tab. x. figs. 13-15; Jones, 1856, Mon. Tert. Entom. p. 14, pl. i. figs. 4, a, b.  
*C. (Cypris) ovum*, Zenker, 1854, Anat. syst. Studien, p. 70, tab. 3 B.  
*C. lævis*, Brady, 1868, Mon. Rec. Brit. Ostrac., Trans. Linn. Soc. vol. xxvi. p. 374, pl. xxiv. figs. 21-26, and pl. xxxvi. fig. 5; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 126, pl. i. figs. 25-28.
- Cypris ovum**, Jurine, 1820. Post-Tertiary, Whittlesea, Cardiff; Recent, Britain, Switzerland.  
*Monoculus ovum*, Jurine, 1820, Hist. des Monocles, p. 179, pl. xix. figs. 18, 19.  
*Cypris minuta*, Baird, 1850, Brit. Entom. p. 155, tab. xviii. figs. 7, 8.  
*C. ovum*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 373, pl. xxiv. figs. 31-34, 43-45, and pl. xxxvi. fig. 8; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 125, pl. i. figs. 29-31.

**Cypris reptans**, Baird, 1835. Post-Tertiary, Berkshire, Cambridgeshire, Essex, Lincolnshire; Recent, Britain, Europe.

*Candonu reptans*, Baird, 1835, Trans. Nat. Club, vol. i. p. 99, pl. iii. fig. 11; id. 1850, Brit. Entom. p. 167, pl. xix. figs. 3, 3 a; Jones, 1856, Mon. Tert. Entom. p. 16, pl. i. figs. 7 a-7 c.

*Cypris reptans*, Lilljeborg, 1853, De Crustaceis, p. 123, tab. xi. figs. 21-23, tab. xii. figs. 7-9; Brady, 1868, Mon. Rec. Brit. Ostr. p. 370, pl. xxv. figs. 10-14, and pl. xxxvi. fig. 4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 128, pl. ii. figs. 31, 32.

**Cypris salina**, Brady, 1868.

Post-Tertiary, Crofthead, Scotland;  
Recent, Great Britain.

*Cypris strigata*, Baird, 1850, Brit. Entom. p. 157.

*C. salina*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 368, pl. xxvi. figs. 8-13; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 124, pl. i. figs. 17-19.

**Cypris virens**, Jurine, 1820.

Post-Tertiary, Crofthead, Scotland;  
Recent, Britain, Sweden, Switzerland, Bohemia.

*Monoculus virens*, Jurine, 1820, Hist. des Monocles, p. 174, pl. xviii. figs. 15, 16.

*Cypris tristriata*, Baird, 1850, Brit. Entom. p. 152, t. xviii. figs. 1 a-i, 2, 3.

*C. virens*, Lilljeborg, 1853, De Crustaceis, p. 117; Brady, 1868, Mon. Rec. Brit. Ostrac., Trans. Linn. Soc. vol. xxvi. p. 364, pl. xxiii. figs. 23-32, and pl. xxxvi. fig. 1; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 124, pl. ii. figs. 27, 28.

### CY THERE, Müller, 1775.

*Cythere*, Müller, 1775, Entomostrac.; Latreille, 1802, Hist. Nat. Crust.; Bose, 1802, Hist. Nat. Crust.; Duméril, 1806, Zool. Anal.; Straus, 1821, Mém. du Muséum, tom. vii.; Desmarest, 1825, Consid. génér. Crust.; Münster, 1830, Jahrb. f. Miner. &c.; Milne-Edwards, 1834, Hist. nat. Crust.; Baird, 1838, Mag. Zool. Bot. vol. ii.; De Koninek, 1842, Descript. Anim. Foss. &c.; McCoy, 1844, Synop. Charact. Foss. &c.; Cornuel, 1846, Mém. Soc. Géol. France, 2nd sér. tom. i.; Jones, 1849, Mon. Pal. Soc. Entomostraca, p. 8.

*Monoculus*, Gmelin, 1791, Syst. Nat. ed. 13; Fabricius, 1792, Entom. Syst.; Manuel, 1792, Encycl. Méthod. Hist. Nat. tom. vii.

*Cytherina*, Lamarck, 1818, Hist. Nat. An. s. Vert. 1st edit.; Hisinger & Nilsson, 1827, Petrif. Suec.; Sowerby, 1834, Geol. Trans. 2nd ser. vol. v.; Lyell & Lonsdale, 1838, Elem. Geol.; Roemer, 1838, N. Jahrb. f. Miner. &c.; id. 1840, Verstein. Kreid. &c.; Philippi, 1844, Tertiär. Verstein. &c.; Reuss, 1845, Verstein. böhm. Kreid.; Williamson, 1847, Trans. Manch. Lit. Phil. Soc. vol. viii.; Bosquet, 1847, Mém. Soc. Roy. Sciences Liège, tom. iv.

*Distribution.* Fossil, Lias to Tertiary. Recent, Marine.

**Cythere alata**, Bosquet, sp., 1847.

Chalk, Maestricht, Norwich, Gravesend, Charlton; Chalk-Marl, Charing.

*Cypridina alata*, Bosquet, 1847, Entom. Foss. Maest. p. 19, no. 13, pl. iv. figs. 1 a-d.

*Cythereis alata*, Jones, 1849, Mon. Pal. Soc. p. 21, pl. v. figs. 14 a-d.

*Cythere alata*, Bosquet, 1854, Mém. Soc. Géol. Néerl. ii. p. 117, pl. ix. figs. 10 a-d.

- Cythere albomaculata**, Baird, 1850. Raised beaches, Glacial Clays,  
Scotland, Ireland, Norway; Recent, Britain, Norway, &c.  
*Cythere albomaculata*, Baird, 1850, Brit. Entom. p. 169, tab. xx. fig. 7: Brady,  
1868, Mon. Entom. Trans. Linn. Soc. vol. xxvi. p. 402, pl. xxviii. figs. 33-39,  
pl. xxxix. fig. 3; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 149,  
pl. ix. figs. 1-4.
- Cythere Aldensis**, M'Coy, sp., 1851. Carboniferous Limestone,  
Aldean, Ayrshire.  
*Cytheropsis Aldensis*, M'Coy, 1851, Ann. & Mag. Nat. Hist. ser. 2, vol. viii.  
p. 387; Salter, 1859, Siluria, 3rd edit. p. 539.  
*Cythere? Aldensis* (M'Coy), Jones, 1867, Siluria, 4th edit. p. 519; Jones and  
Holl, 1868, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 60, pl. vii. fig. 12.
- Cythere? amissa**, Jones, 1870. Lower Eocene, Woolwich.  
*Cythere Kostelensis* (non Reuss), Jones, 1854, Quart. Journ. Geol. Soc. vol. x.  
p. 161, t. 3. fig. 10; Jones, Tertiary Entom., Mon. Pal. Soc. 1856, p. 28,  
pl. vi. figs. 14 a, b.  
*C. amissa*, Jones, 1870, Geol. Mag. vol. vii. p. 156.
- Cythere amputata**, Kirkby, 1859. Permian, Durham.  
*Bairdia truncata*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 423,  
pl. xi. fig. 4.  
*Cythere amputata*, Kirkby, 1859, Trans. Tynes, Nat. Field-Club, vol. iv. p. 155,  
pl. x. fig. 4; id. op. cit. Append. p. 167, pl. xi. figs. 22 a, 22 b.
- Cythere angulata**, G. O. Sars, 1865. Post-Tertiary, Gt. Britain,  
Ireland, Norway; Recent, Gt. Britain, Norway, Baffin's Bay.  
*Cythereis angulata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 40.  
*Cythere clathrata*, var. *nuda*, Brady, 1865, Zool. Trans. vol. v. p. 377, pl. lix.  
figs. 9, 10.  
*C. angulata*, Brady, 1868, Mon. Rec. Brit. Ostrac. vol. ix. p. 409, pl. xxvi.  
figs. 39-42; Brady, Crossk. & Robertson, 1874, Mon. Pal. Soc. p. 162, pl. iv.  
figs. 17-24, & pl. x. fig. 22.
- Cythere angulatopora**, Reuss, sp., 1850. U. Eocene, Isle of Wight,  
France, Belgium.  
*Cypridina angulatopora*, Reuss, Haidinger's Abhandl. vol. iii. p. 86, t. 10.  
fig. 32; Bosquet, Mém. Couron. Acad. Belg. xxiv. p. 68, t. 3. fig. 5.  
*Cythere angulatopora*, Jones, 1854, Quart. Journ. Geol. Soc. vol. x. p. 162, t. 3.  
fig. 12; Mon. Pal. Soc., Tertiary Entom. 1856, p. 34, pl. vi. fig. 18, pl. iv.  
figs. 17 & 18.
- Cythere antiquata**, Baird, sp., 1850. Post-Tertiary, Belfast and Oban;  
Recent, Great Britain, Bay of Biscay, Levant.  
*Cythereis antiquata*, Baird, 1850, Brit. Entom. p. 176, pl. xx. fig. 2.  
*Cythere antiquata*, Brady, 1868, Mon. Rec. Brit. Ostrac. p. 417, pl. xxx. figs.  
17-20; Brady, Crossk., & Robertson, 1874, Mon. Pal. Soc. p. 170, pl. xii.  
figs. 8-10.
- Cythere aspera**, Brady, 1865. Brickearth of the Nar.  
*Cythere aspera*, Brady, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 190,  
pl. ix. figs. 12-19.
- Cythere badia**, Norman, 1862. Raised beaches and Glacial Clay,  
Scotland, Ireland, and Norway; Recent, Norway, Britain, &c.  
*Cythere badia*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix. p. 48, pl. iii.  
figs. 13-15; Brady, 1868, Mon. Entomos., Trans. Linn. Soc. vol. xxvi. p. 399,  
pl. xxix. figs. 56-59.  
*C. canaliculata*, Brady, 1865, Trans. Zool. Soc. vol. v. p. 373, pl. 59. figs. 4 a-f.

- Cythere Baillyana**, Jones and Holl, 1868. Carb. Limestone, Chair of Kildare, Ireland.  
*Cythere Baillyana*, Jones and Holl, 1868, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 57, pl. vii. figs. 7 *a*, 7 *b*.
- Cythere Bairdiana**, Jones, 1849. Greensand, Farringdon.  
*Cythere Bairdiana*, Jones, 1849, Mon. Pal. Soc. Cret. Entom. p. 13, t. ii. figs. 5 *a-c*.
- Cythere bilobata**, Münster, 1830. Carb. Limestone, Britain and Europe.  
*Cythere bilobata*, Münster, 1830, Jahrb. Min. p. 65. no. 20; Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xv. p. 409, pl. xx. figs. 10 *a*, 10 *b*.
- Cythere Blakei**, Jones, 1872. Lias, Yorkshire.  
*Cythere Blakei*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 146.
- Cythere Bosquetiana**, Jones, 1849. Chalk-marl, Charing.  
*Cytherella*(?) *Bosquetiana*, Jones, 1849, Mon. Pal. Soc. Cret. Entom. p. 33, t. vi. figs. 23 *a-c*.
- Cythere botellina**, Jones, 1870. Upper Eocene, Isle of Wight; Crag, Suffolk. Recent, Britain, Europe.  
*Cythere botellina*, Jones, 1870, Geol. Mag. vol. vii. p. 157.  
*Cytherideis flavida*, Müller, sp., Entom. p. 66, t. 7. figs. 5, 6.  
*Cythere flavida*, Baird, Mag. Zool. & Bot. ii. p. 184; id. Trans. Berw. Nat. Club, ii. p. 153; id. Brit. Entom. p. 168, t. 21. fig. 12.  
*Monoculus flavidus*, Gmelin, Linn. Syst. Nat. p. 3001. no. 33.  
*Cytherideis flavidus*, Jones, 1856, Tert. Entom. Mon. Pal. Soc. p. 50, pl. iv. figs. 4 *a-c*.
- Cythere Bowerbankiana**, Jones, 1856. Eocene, London.  
*Cythere Bowerbankiana*, Jones, 1856, Tert. Entom. Mon. Pal. Soc. p. 38, pl. vi. figs. 7, 8.  
*Cythereis Bowerbankiana*, Jones, 1870, Geol. Mag. vol. vii. p. 158.
- Cythere castanea**, G. O. Sars, 1865. Glacial, Scotland, South Wales: Recent, Britain and Norway.  
*Cythere castanea*, Sars, 1865, Oversigt af Norges marine Ostr. p. 32; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 398, pl. xxviii. fig. 27, and pl. xxxviii. fig. 6; Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. pl. xix. figs. 15-18; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 143, pl. xiii. figs. 8-11, and pl. iii. fig. 25.
- Cythere ceratoptera**, Bosquet, sp., 1852. Pliocene, Suffolk: Upper and Middle Eocene, Belgium and France.  
*Cythereis ceratoptera*, Bosquet, 1852, Mém. Couron. Acad. Belg. xxiv. p. 114, t. 5. fig. 2; Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 39, pl. iv. fig. 1.  
*Cythere ceratoptera*, Jones, 1870, Geol. Mag. vol. vii. p. 158.
- Cythere cicatricosa**, Reuss, 1849. Brick-earth of the Nar, Hopton Cliff, Yarmouth: Post-Tertiary, France, Germany.  
*Cypridina cicatricosa*, Reuss, 1849, Die fossil. Entomost. österreich. Tertiär-beckens, p. 27, pl. ix. figs. 21 *a*, *b*.  
*Cythere cicatricosa*, Bosquet, 1852, Entom. Foss. Terr. Tertiair. France, p. 76, pl. iii. fig. 13; Brady, Crosskey, and Robertson, Mon. Pal. Soc. p. 151, pl. xiv. figs. 7-10.  
*C. arborescens*, Brady, 1865, Ann. & Mag. Nat. Hist. vol. xvi. pl. ix. figs. 5-8.

**Cythere Cluthæ**, Brady, Crosskey, and Robertson, 1874. Post-Tertiary, Scotland.

*Cythere Cluthæ*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 153, pl. xiii. figs. 16, 17.

**Cythere concentrica**, Reuss, sp., 1845. Chalk and Chalk-marl, Charing and Dover; Gault, Folkestone &c.; Chalk, Limbourg, Bohemia; Greensand, Warminster; Hils-clay, Germany; Lower Greensand, France.

*Cytherina concentrica*, Reuss, 1845, Böhm. Kreid. pl. 24. fig. 22; Williamson, 1847, Trans. Manchester Lit. & Phil. Soc. vol. viii. pl. 4. fig. 77.

*Cythere sculpta*, Cornuel, 1846, Mém. Soc. Géol. France, vol. i. p. 201, pl. 8. figs. 20-23.

*Cypridina Roemeriana*, Bosquet, 1847, Mém. Soc. Roy. Liège, vol. iv. p. 362, pl. 2. figs. 2a-f.

*Cythere punctulata*, Jones, 1849, Mon. Pal. Soc. p. 11, pl. i. figs. 2a-n; Bosq. 1852, Mém. C. Acad. Belg. vol. xxiv. p. 73, pl. 3. figs. a-d.

*C. concentrica*, Bosq. 1856, Mem. C. C. S. Néerl. vol. ii. p. 81, pl. 8. figs. 8a-d.

**Cythere concinna**, Jones, 1856. Post-Tertiary, England, Scotland, Norway, Canada; Recent, Great Britain, Ireland, Norway, Gulf of St. Lawrence.

*Cythere concinna*, Jones, 1856, Mon. Tert. Entom. p. 29, pl. iv. figs. 7a-7f; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 408, pl. xxvii. figs. 28-33, and pl. xxxviii. fig. 7; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 160, pl. iv. figs. 1-16.

*Cythereis clavata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 39.

**Cythere consobrina**, Jones, 1856. Middle Eocene, Barton, Hants.

*Cythere consobrina*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 27 (not figured).

**Cythere convexa**, Baird, 1850. Glacial Clay, raised beaches, and Crag, Britain; Tertiary, Germany, Sicily; Recent, Britain, Levant, &c.

*Cythere convexa*, Baird, 1850, Brit. Entom. p. 174, tab. xxi. fig. 3; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 401, pl. xxix. figs. 19-27, and pl. xxxix. fig. 4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 150, pl. iii. figs. 14-17.

*C. arborescens*, Brady, 1865, Ann. & Mag. Nat. Hist. vol. xvi. pl. ix. figs. 5-8.

*C. punctata*, Jones, 1856, Tert. Entom. p. 24, pl. ii. figs. 5a-5h.

**Cythere corbuloides**, Jones and Holl, 1869. Silurian, Wenlock Limestone and Shale, Malvern.

*Cythere corbuloides*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 211, pl. xv. figs. 4a-4c, 5a, b.

**Cythere cornuta**, Roemer, sp., 1838. Upper Eocene, Isle of Wight; Middle Eocene, Bracklesham.

*Cythere cornuta*, Roemer, sp., Jones, 1856, Mon. Pal. Soc. p. 39, pl. iv. fig. 19, pl. v. figs. 15a & b; id. 1870, Geol. Mag. vol. vii. p. 158.

**Cythere costata**, Brady, 1865. Post-Tertiary, England and Scotland; Recent, Arctic seas, Shetland, &c.

*Cythere costata*, Brady, 1865, Trans. Zool. Soc. vol. v. p. 375, pl. lx. figs. 5a-f; Norman, 1869, Brit. Assoc. Report, 1868, p. 290; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 166, pl. v. figs. 21-24.

**Cythere costellata**, Roemer, sp., 1838. Middle Eocene, England and France.

*Cytherina costellata*, Roemer, 1838, Neues Jahrbuch f. Min. &c. p. 517, t. 6. fig. 24.

*Cythere costellata*, Bosquet, 1852, Mém. Couron. Acad. Belg. xxiv. p. 58, t. 2. figs. 11a-d; Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 32, pl. v. fig. 14; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 152, pl. xvi. figs. 13-15.

**Cythere cribrosa**, Brady, Crosskey, and Robertson, 1874. Post-Tertiary, England, Bridlington.

*Cythere cribrosa*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 146, pl. x. figs. 5-7.

**Cythere crispata**, Brady, 1868. Post-Tertiary, Scotland, Ireland, Norway: Recent, Great Britain, Ireland, Europe, Australia, Hong Kong.

*Cythere cicatricosa*, G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 33; Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 369, pl. xix. figs. 13, 14.

*C. badia* (in part), Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 399 (not figured) (not *C. badia* of Norman); id. 1868, Les Fonds de la Mer, vol. i. p. 89.

*C. crispata*, Brady, 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 221, pl. xiv. figs. 14, 15; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 146, pl. x. figs. 52, 53, pl. xiii. figs. 12, 13.

**Cythere cuneiformis**, Brady, 1868. Glacial clays and raised beaches, Scotland and Norway; Recent, Britain, Norway.

*Cythere ventricosa*, 1865, Sars, Oversigt Norges mar. Ostr. p. 34.

*C. cuneiformis*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 404, pl. xxxi. figs. 47-54; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 154, pl. x. figs. 23-26.

**Cythere deflexa**, Brady, Crosskey, and Robertson, 1874. Post-Tertiary, Scotland, Jordan Hill.

*Cythere deflexa*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 145, pl. xiii. figs. 14, 15.

**Cythere dictyosigma**, Jones, 1856. Pliocene, Suffolk.

*Cythere dictyosigma*, Jones, 1856, Mon. Pal. Soc., Tert. Entom. p. 30.

**Cythere Dunelmensis**, Norman, 1865. Post-Tertiary, Great Britain: Recent, Great Britain, Gulf of St. Lawrence, Arctic Seas.

*Cythereis Dunelmensis*, Norman, 1865, Nat. Hist. Trans. Northumberland and Durham, vol. i. p. 22, pl. vii. figs. 1-4.

*C. horrida*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 45.

*Cythere Dunelmensis*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 416, pl. xxx. figs. 1-12; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 168, pl. v. figs. 13-20, pl. xi. figs. 36, 37.

**Cythere emaciata**, Brady, 1866. Raised beaches, Scotland; Recent Britain.

*Cythere emaciata*, Brady, 1866, Brit. Assoc. Report, p. 219; id. 1868, Trans. Linn. Soc. vol. xxvi. p. 414, pl. xxxi. figs. 31-37; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 161, pl. ix. figs. 14-17.

**Cythere emarginata**, Sars, sp. 1856. Post-Tertiary, England, Scotland ;  
Recent, Shetland, Norway, &c.

*Cythereis emarginata*, G. O. Sars, 1856, Overs. Norg. mar. Ostroc. p. 38.

*Cythere emarginata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 475 ; Brady,  
Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 166, pl. v. figs. 1-6.

**Cythere Finmarchica**, Sars, sp., 1865. Glacial, Scotland ; Recent,  
Britain, Norway, &c.

*Cythereis Finmarchica*, G. O. Sars, 1865, Oversight af Norges marine Ostrac. p. 41.

*Cythere Finmarchia*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 410, pl. xxxi.  
figs. 9-13 ; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 153, pl. x.  
figs. 18-21.

**Cythere Gaultina**, Jones, 1849. Gault, Folkestone.

*Cythereis Gaultina*, Jones, 1849, Cret. Entomostr., Mon. Pal. Soc. p. 17, t. ii.  
figs. 7, a-c.

**Cythere Geinitziana**, Jones, 1850. Permian, Durham.

*Cythere Geinitziana*, Jones, 1850, in King's Perm. Foss., Mon. Pal. Soc. p. 62,  
pl. vi. fig. 46, pl. xviii. figs. 4 a-4 c ; Kirkby and Jones, 1859, Trans. Tynes.  
Nat. Field-Club, vol. iv. p. 159, pl. xi. figs. 4 a-4 c.

**Cythere gibbosa**, Brady and Robertson, 1869. Post-Tertiary, Portrush,  
Ireland ; Recent, Great Britain, Ireland.

*Cythere gibbosa*, Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 4,  
vol. iii. p. 368, pl. xxi. figs. 1-3 ; Brady, Crosskey, and Robertson, 1874, Mon.  
Pal. Soc. p. 150, pl. xvi. figs. 16-18.

**Cythere globulifera**, Brady, 1868. Post-Tertiary, Great Britain,  
Canada ; Recent, Ireland, Spitzbergen.

*Cythere globulifera*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 406, pl. xxxi.  
fig. 42 ; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 155, pl. ix.  
figs. 18-20, (?) 21, 22, pl. xii. figs. 11, 12, and pl. xv. figs. 19, 20.

**Cythere Grindrodiana**, Jones and Holl, 1869. Woolhope Shales,  
Malvern.

*Cythere Grindrodiana*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4,  
vol. iii. p. 212, and woodcut.

**Cythere Harknessiana**, Jones and Holl, 1868. Carboniferous Lime-  
stone, Chair of Kildare, Ireland.

*Cythere Harknessiana*, Jones and Holl, 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii.  
p. 57, pl. vii. figs. 8 a, 8 b.

**Cythere Harrisiana**, Jones, 1869. Chalk, Woolwich ; Chalk-marl,  
Charing ; Greensand, Blackdown, Farringdon ;  
Gault, Folkestone.

*Cythere interrupta*, 1849, Jones, Mon. Pal. Soc. p. 16, pl. ii. figs. 6 a-h.

*C. Harrisiana*, Jones, 1870, Geol. Mag. vol. vii. p. 76.



**Cythere horrescens**, Bosquet, 1852. Eocene, England, France; Recent, Norway.

*Cythereis horrescens*, Bosquet, 1852, Mém. Couron. Acad. Belg. xxiv. p. 116, t. 6. fig. 5.

*Cythereis? latidentata*, Bornemann, Zeitsch. deutsch. geol. Ges. vii. p. 366, t. 21. fig. 6.

*C.? horrescens*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 38, pl. v. figs. 9, 17 a, 17 b.

**Cythere? impressa**, M'Coy, 1844. Carboniferous Limestone, Dromard, Londonderry, Ireland.

*Cythere? impressa*, M'Coy, 1844, Synops. Carb. Foss. Ireland, p. 166, pl. xxiii. fig. 16.

**Cythere inflata?**, M'Coy, 1844. Carboniferous Limestone, Ballyduff, Dungaroon, Ireland.

*Cythere inflata?*, M'Coy, 1844, Synop. Carb. Foss. Ireland, p. 167, pl. xxiii. fig. 17.

**Cythere intermedia**, Münster, 1830. Carboniferous Limestone, Britain.

*Cythere intermedia*, Münster, 1830, Jahrb. f. Min. p. 65. no. 22; Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3, vol. xv. p. 409, pl. xx. figs. 9 a-9 e.

*C. subreniformis*, Kirkby, 1859, Trans. Tyneside Nat. Field-Club, vol. iv. p. 154, pl. xi. fig. 23.

**Cythere Jeffreysii**, Brady, 1868. Raised beaches, Scotland; Recent, Britain, Ireland.

*Cythere Jeffreysii*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 412, pl. xxix. figs. 51-55; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 156, pl. iii. figs. 18, 19.

**Cythere Jonesii**, Baird, 1850. Post-Tertiary, England, Ireland, France, Belgium; Recent, Great Britain, Norway.

*Cythereis Jonesii*, Baird, 1850, Brit. Entom. p. 175, pl. xx. fig. 1; Norman, 1865, Nat. Hist. Trans. Northumberland and Durham, vol. i. p. 21, pl. vii. figs. 5-8.

*Cythere ceratoptera*, Bosquet, 1852, Entom. foss. terr. tert. France, p. 114, pl. vi. fig. 2; Jones, 1856, Mon. Tert. Entom. p. 39, pl. iv. fig. 1.

? *Cythereis cornuta* (young), Jones, 1856, Mon. Tert. Entom. p. 39, pl. iv. fig. 19.

*C. fimbriata*, Norman, 1862, Ann. & Mag. Nat. Hist. ser. 3, vol. ix. pl. iii. fig. 19.

*C. spectabilis*, Sars, 1865, Overs. Norg. mar. Ostrac. p. 46.

*C. subcoronata*, Brady, 1865, Trans. Zool. Soc. vol. v. p. 384, pl. ix. figs. 9 a-e; Speyer, 1863, Ostrac. Casseler Tertiarbild. p. 38, pl. iv. figs. 9, 10.

*Cythere Jonesii*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 418, pl. xxx. figs. 13-16; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 171, pl. xii. figs. 4-7.

- Cythere Jukesiana**, Jones and Holl, 1868. Carboniferous Limestone,  
Chair of Kildare, Ireland.  
*Cythere Jukesiana*, Jones and Holl, 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii.  
p. 57, pl. vii. figs. 6 a, 6 b.
- Cythere Kutorgiana**, Jones, 1850. Permian, Durham.  
*Cythere Kutorgiana*, Jones, 1850, in King's Monog. Perm. Foss., Mon. Pal. Soc.  
p. 62, pl. xviii. fig. 6; Kirkby and Jones, 1859, Trans. Tynes. Nat. Field-Club,  
vol. iv. p. 159, pl. xi. figs. 3 a, 3 b.
- Cythere laqueata**, Jones, 1856. Red Crag, Essex; Pliocene, Suffolk.  
*Cythere laqueata*, Jones, 1856, Mon. Pal. Soc., Tert. Entom. p. 30, pl. iii.  
figs. 3 a-h.
- Cythere laticarina**, Brady, 1868. Raised beaches, Scotland; Recent,  
Britain and Spitzbergen.  
*Cythere laticarina*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 412, pl. xxxi.  
figs. 1-4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 158,  
pl. ix. figs. 23-26.
- Cythere latimarginata**, Speyer, 1863. Post-Tertiary, England, Germany;  
Recent, Norway and Shetland.  
*Cythere latimarginata*, Speyer, 1863, Die Ostrac. der Casseler Tertiärbild.  
p. 22, pl. iii. figs. 3 a-d.  
*C. abyssicola*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 43.  
*C. latimarginata*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 163,  
pl. xvi. fig. 6.
- Cythere leioderma**, Norman, 1868. Post-Tertiary, Bridlington;  
Recent, Shetland, Gulf of St. Lawrence.  
*Cythere leioderma*, Norman, 1868, Last Shetland Dredging Report, p. 291;  
Brady, 1870, Ann. & Mag. Nat. Hist. ser. 4, vol. vi. p. 451, pl. xix. figs. 11-  
13; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 149, pl. ix.  
figs. 5, 6.
- Cythere liassica**, Brodie, sp., 1845. Rhætic, Wainlode, Severn.  
*Cypris liassica*, Brodie, 1845, Hist. Foss. Insects Secondary Rocks, p. 80;  
id. 1867, Quart. Journ. Geol. Soc. vol. xxiii. pp. 465, 498; Salter & Wood-  
ward, 1865, Chart Foss. Crust. fig. 87, p. 21.
- Cythere limicola**, Norman, sp., 1865. Post-Tertiary, Scotland, Canada;  
Recent, Britain, Norway, Baffin's Bay.  
*Cythereis limicola*, Norman, 1865, Nat. Hist. Trans. Northumb. and Durham,  
vol. i. p. 20, pl. vi. figs. 1-4.  
*Cythere nodosa*, G. O. Sars, 1865, Oversigt Norges mar. Ostr. p. 34.  
*C. complexa*, Brady, 1866, Brit. Assoc. Report, p. 210.  
*C. areolata*, Brady, 1865, Trans. Zool. Soc. Lond. vol. v. p. 381, pl. lxii.  
figs. 2 a-d.  
*C. limicola*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 405, pl. xxxi. figs. 38-41,  
43-46; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 154, pl. x.  
figs. 1-4.

**Cythere Logani**, Brady and Crosskey, 1871. Post-Tertiary, Scotland, America.

*Cythere Logani*, Brady and Crosskey, 1871, Geol. Mag. vol. viii. p. 63, pl. ii. figs. 8, 9; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 165, pl. xv. figs. 17, 18.

**Cythere Lonsdaleiana**, Jones, 1849. Chalk, Norwich.

*Cythereis Lonsdaleiana*, Jones, 1849, Mon. Pal. Soc., Cret. Entom. p. 20, pl. v. figs. 12 a-c.

**Cythere lutea**, Müller, 1785. Post-Tertiary, Scotland, Ireland, Canada, Norway; Recent, Great Britain and America.

*Cythere lutea*, Müller, 1785, Entomotraca, p. 65, tab. vii. figs. 3, 4; Zenker, 1854, Ueber die Kriebsthiere, p. 83, tab. v. C; G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 28; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 395, pl. xxviii. figs. 47-56, pl. xxxix. fig. 2; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 148, pl. iii. figs. 1-6.

*C. reniformis*, Baird, 1850, Brit. Entom. p. 169, tab. xx. figs. 5, 5 a-f.

*C. setosa*, Brady, 1865, Trans. Zool. Soc. Lond. p. 372, pl. lviii. figs. 12, 13, 15 a.

**Cythere Macallana**, Brady and Robertson, 1869. Post-Tertiary, Scotland; Recent, Great Britain and Ireland.

*Cythere Macallana*, Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 368, pl. xix. figs. 5-9; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 144, pl. xiii. figs. 1, 2.

*C. propinqua*, G. O. Sars, 1869, Undersøgelser over Christianiafjordens Dybvandsfauna, p. 57, and note, p. 58.

**Cythere macrophthalma**, Bosquet, 1847. Chalk, Norwich; Maestricht.

*Cypridina macrophthalma*, Bosquet, 1847, Entom. foss. Maestricht, p. 16. n. 10, pl. iii. figs. 3 a-d.

*Cythereis macrophthalma*, Jones, 1849, Cretac. Entom., Mon. Pal. Soc. p. 17, t. 2. figs. 8 a-b<sup>'''</sup>.

*Cythere macrophthalma*, Bosquet, 1854, Mém. Cour., Carte Géol. Néerl. ii. p. 86, pl. 9. fig. 4.

**Cythere macropora**, Bosquet, 1852. Pliocene, Suffolk; M. Eocene, France.

*Cythere macropora*, Bosquet, 1852, Mém. Couron. Acad. Belg. xxiv. p. 97, t. 5. fig. 2; Jones, Tert. Entom., Mon. Pal. Soc. 1856, p. 35. pl. iii. figs. 9 a-e; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 159, pl. xiv. figs. 1-3.

**Cythere mirabilis**, Brady, 1868. Post-Tertiary, England, Scotland; Recent, Scotland, Spitzbergen.

*Cythere mirabilis*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 415, pl. xxix. figs. 7, 8; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 167, pl. vii. figs. 22-26, pl. xx. figs. 13-16.

**Cythere Moorei**, Jones, 1872. Lias, Yorkshire.

*Cythere Moorei*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 146.

**Cythere Morrisiana**, Jones, 1850.

Permian, Durham.

*Cythere Morrisiana*, Jones, 1850, King's Monog. Perm. Foss., Mon. Pal. Soc. p. 61, pl. xviii. figs. 2 *a*-2 *c*; id. 1859, Trans. Tynes. Nat. Field-Club, vol. iv. p. 158, pl. xi. figs. 1 *a*-1 *c*.

**Cythere Muensteriana**, Jones and Kirkby, 1865.

Carboniferous Limestone, Britain &amp;c.

*Cythere Muensteriana*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3, vol. xv. p. 410, pl. xx. figs. 11 *a*, 11 *b*.

**Cythere mundula**, Jones, 1867.

Lias, Weston near Bath.

*Normania mundula*, Jones, 1867, in C. Moore's paper, Quart. Journ. Geol. Soc. vol. xxiii. pp. 467, 497, &c. &c.

**Cythere nuciformis**, Jones, 1850.

Permian, Durham; Zechstein, Germany.

*Cythere (Cytherella?) nuciformis*, Jones, 1850, in King's Monog. Perm. Foss., Mon. Pal. Soc. p. 64, pl. xviii. figs. 11 *a*-11 *c*; Reuss, 1854, Jahresh. wetter. Ges. p. 68, fig. 9; Richter, Zeitsch. deut. geol. Ges. vol. vii. p. 529, pl. 26. figs. 8, 9.

*Cythere nuciformis*, Kirkby and Jones, 1859, Trans. Tynes. Nat. Field-Club, vol. iv. p. 160, pl. xi. figs. 7 *a*-7 *c*.

**Cythere? orbicularis**, McCoy, 1844.

Carboniferous Limestone, Bunowna, Sligo, Ireland.

*Cythere? orbicularis*, McCoy, 1844, Synop. Carb. Foss. Ireland, p. 167, pl. xxiii. fig. 19.

**Cythere ornatissima**, Reuss, var. **cornuta**, Jones, 1870. Chalk, Chalkmarl, Gault, Kent; Upper and Middle Eocene, England; Middle Eocene, Europe.

*Cytherina ornatissima*, Roemer, 1838, Neues Jahrbuch, p. 518, pl. vi. fig. 31; Reuss, 1845, Verst. böhm. Kreid. p. 105, pl. 24. fig. 23 (not *C. cornuta*, Reuss, Haid. Abhandl. vol. iii. p. 81, pl. 10. fig. 8).

*Cythere cornuta*, Bosquet, 1852, Mém. Cour. Acad. Belg. vol. xxiv. p. 117, pl. 6. fig. 4; Reuss, Zeitsch. d. g. Ges. vol. vii. p. 282, pl. x. fig. 10.

*Cythereis cornuta*, Jones, 1848, Monog. Cret. Entom., Mon. Pal. Soc. p. 21, pl. v. figs. 13, *a*-*e*; id. 1856, Mon. Tert. Entom., Mon. Pal. Soc. p. 39, pl. iv. fig. 19, pl. v. figs. 15 *a*, *b*.

*Cythere ornatissima*, var. **cornuta**, Jones, 1870, Geol. Mag. vol. vii. pp. 75, 76.

**Cythere pellucida**, Baird, 1850.

Raised beaches and Glacial beds, Britain and Norway; Recent, Britain, Ireland, Norway, &amp;c.

*Cythere pellucida*, Baird, 1850, Brit. Entom. p. 172, t. xxi. fig. 7; G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 31; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 397, pl. xxviii. figs. 22-26, 28; Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. pl. xix. figs. 10-12; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 142, pl. iii. figs. 20-24.

**Cythere plicata**, Münster, 1830. Upper Eocene, Isle of Wight, Hampshire; Upper and Middle Eocene, Europe.

*Cythere plicata*, Münster, 1830, Jahrbuch f. Min. &c. p. 63, 1835, p. 446; Roemer, 1838, in N. Jahrb. p. 518, t. 6. fig. 26; Jones, 1854, Quart. Journ. Geol. Soc. x. p. 162, t. ii. fig. 13; Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 32, pl. iv. fig. 16, pl. v. figs. 8 a-d & fig. 17.

**Cythere plicata**, var. *laticostata*, Jones, 1870, Geol. Mag. vol. vii. p. 156.

**Cythere porcellanea**, Brady, 1869. Post-Tertiary, Scotland, South Wales; Recent, Great Britain, Ireland, Holland.

*Cythere porcellanea*, Brady, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 47, pl. vii. figs. 1-4; Brady and Robertson, 1869, *ibid.* ser. 4, vol. iii. p. 367, pl. xix. figs. 1-4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 144, pl. xiii. figs. 3-5.

**Cythere pulchella**, Brady, 1868. Post-Tertiary, Scotland, Ireland; Recent, Scotland, Ireland, Holland, Baffin's Bay.

*Cythere pulchella*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 404; *id.* 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 32, pl. v. figs. 18-20; Brady and Robertson, 1869, *ibid.* ser. 4, vol. iii. p. 369, pl. xx. figs. 1-3; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 157, pl. iii. figs. 29-37.

**Cythere punctata**, Münster, 1830. Pliocene, Suffolk; Upper and Middle Tertiary, Europe: Recent, Britain, Europe.

*Cythere punctata*, Münster, 1830, Jahrb. f. Min. &c. p. 62; Jones, 1856, Mon. Pal. Soc. p. 14, pl. ii. figs. 5 a, b, d, f, h (non figs. c, e, g).

*Cytherina punctata*, Roemer, 1838, N. Jahrb. p. 515, pl. vi. fig. 5.

*Cypridina punctata*, Reuss, 1850, Haidinger's Abhandl. vol. iii. p. 68, pl. 9. fig. 24.

*Cythere convexa*, Baird, 1850, Brit. Entom. p. 174, pl. xxi. fig. 3; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 401, pl. xxix. figs. 19-27.

**Cythere pusilla?** McCoy, 1844. Carboniferous Limestone, Cullion, Draperstown, Londonderry, Ireland.

*Cythere pusilla?*, McCoy, 1844, Synop. Carb. Foss. Ireland, p. 167, pl. xxiii. fig. 20.

**Cythere quadridentata**, Baird, 1850. Glacial Beds, Scotland; Recent, Britain and Bay of Biscay.

*Cythere quadridentata*, Baird, 1850, Brit. Entom. p. 173, t. xxi. fig. 2; Brady, 1868, Tr. Linn. Soc. vol. xxvi. p. 413, pl. xxxi. figs. 19-30; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 161, pl. xiii. fig. 22.

**Cythere quadrilatera**, Roemer, 1840. Chalk and Chalk-marl, S.E. England; Gault, Folkestone; Chalk, Saxony and N. Germany; Chalk and Chalk-marl, Bohemia; Lower Greensand, France.

*Cytherina quadrilatera*, Roemer, 1840, Verstein. Kreid. p. 105. no. 7, pl. xvi. fig. 19.

*Cythere harpa*, Cornuel, 1846, Mém. Soc. Géol. France, ser. 2, vol. i. pt. 2, p. 199. no. 2, pl. viii. fig. 13.

*Cythereis quadrilatera*, Jones, 1849, Cret. Entom., Mon. Pal. Soc. p. 18, t. iii., iv. figs. 10 a-j.

- Cythere retifastigiata**, Jones, 1856. \* Pliocene, Suffolk.  
*Cythere retifastigiata*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 36, pl. iii. fig. 7.
- Cythere Robertsoni**, Brady, 1868. Post-Tertiary, Scotland and Norway ; Recent, Great Britain, Ireland, Norway.  
*Cythere Robertsoni*, Brady, 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 33, pl. iv. figs. 5, 8, 9, 10 ; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 221.
- Cythere scabropapulosa**, Jones, 1856. Middle Eocene, Bracklesham.  
*Cythere scabropapulosa*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 31, pl. v. fig. 16.
- Cythere scrobiculoplicata**, Jones, 1856. Lower Eocene, London.  
*Cythere scrobiculoplicata*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 33, pl. vi. figs. 4, 6 a d.
- Cythere scrobiculoplicata**, var. *recta*, Jones, 1856. Middle Eocene, East Woodhay, Hampshire.  
*C. scrobiculoplicata*, var. *recta*, Jones, 1856, *op. cit.* p. 34, pl. vi. fig. 9.
- Cythere (?) semipunctata**, Brady, 1868. Post-Tertiary, Scotland ; Recent, Bay of Biscay, England, and Ireland.  
*Cythere (?) semipunctata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 411, pl. xxix. figs. 33-38 ; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 172, pl. xvi. figs. 11, 12.
- Cythere senilis**, Jones, 1856. Pliocene, Suffolk.  
*Cythereis senilis*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 37, pl. iii. figs. 8 a, 8 b.  
*Cythere senilis*, Jones, 1870, Geol. Mag. vol. vii. p. 158.
- Cythere simulata**, Jones, 1869. Chalk-marl, Charing.  
*Cythere faba*, Jones (non Reuss), 1849, Cret. Entom., Mon. Pal. Soc. p. 13, t. ii. figs. 4 a-c.  
*C. simulata*, Jones, 1870, Geol. Mag. vol. vii. pp. 75, 76.
- Cythere sphærulolineata**, Jones, 1856. Pliocene, Suffolk.  
*Cythere sphærulolineata*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 36, pl. iii. fig. 6.
- Cythere striatopunctata**, Roemer, sp., 1838. Middle Eocene, England, Europe.  
*Cytherina striatopunctata*, Roemer, sp., 1838, in Neues Jahrb. f. Min. &c. p. 515, t. vi. fig. 2 ; Bosquet, Mém. Couron. Acad. Belg. xxiv. p. 62, t. iii. fig. 1 ; Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 27, pl. v. figs. 6, 7, 10.
- Cythere sublacunosa**, Jones, 1869. Pliocene, Suffolk ; Recent, Norway.  
*Cythere lacunosa*, Jones (non Reuss), 1856, Mon. Pal. Soc., Tert. Entom. p. 31, pl. iii. figs. 5 a, b.

**Cythere tenera**, Brady, 1868. Post-Tertiary, Scotland, South Wales ; Recent, Great Britain, Ireland, Shetland, Bay of Biscay, Besika Bay.

*Cythere tenera*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 399, pl. xxviii. figs. 29-32; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 145, pl. xiii. figs. 6, 7.

**Cythere Terquemiana**, Jones, 1872. Lias, Yorkshire.

*Cythere Terquemiana*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 147.

**Cythere trachypora**, Jones, 1856. Pliocene, Suffolk ; Recent, Norway.

*Cythere trachypora*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 36, pl. iii. figs. 9 f-i.

*C. limicola*, Sars (?).

**Cythere trigonula**, Jones, 1856. Pliocene, Suffolk.

*Cythere trigonula*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 25, pl. iii. figs. 1 a-k.

**Cythere triplicata**, Roemer, 1840. Chalk and Chalk-marl, S.E. of England ; Gault, Folkestone ; Hils-clay, North Germany ; Lower Greensand, France.

*Cythere (Cytherina) triplicata*, Roemer, 1840, Verstein. Kreidegebirge, p. 104. no. 3, pl. xvi. fig. 16.

*Cythere auriculata*, Cornuel, 1846, Mém. Soc. Géol. de France, sér. 2, t. i. pt. 2, p. 200. no. 3, pl. viii. figs. 14-16.

*Cythereis triplicata*, Jones, 1849, Cret. Entomotr., Mon. Pal. Soc. p. 18, t. iii. figs. 9 a-h.

**Cythere tuberculata**, G. O. Sars, 1865. Post-Tertiary, Great Britain, Ireland, Norway ; Recent, Great Britain, Norway, Bay of Biscay, West Indies, &c.

*Cythereis tuberculata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 37.

*Cythere mutabilis, clathrata*, var. *lyrata*, et ? var. *latimarginata*, Brady, 1865, Trans. Zool. Soc. vol. v. p. 377, pl. lix. figs. 12-14.

*Cythere tuberculata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 406, pl. xxx. figs. 25-41 (not *Cytherideis tuberculata* of Jones, Tert. Entom. p. 49); Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 164, pl. v. figs. 7-12.

**Cythere Tyronica**, Kirkby and Jones, 1859. Permian, Tyrone, Ireland.

*Cythere? inornata*, McCoy, 1856, King and Jones, Journ. Geol. Soc. Dublin, vol. vii. p. 69, note, p. 78, pl. i. fig. 13.

*C. Tyronica*, Kirkby and Jones, 1859, Trans. Tynes. Nat. Field-Club, Appendix, p. 46, pl. xi. figs. 20 a, 20 b.

**Cythere villosa**, G. O. Sars, 1865. Post-Tertiary, England, Ireland. Norway ; Recent, Great Britain, Norway.

*Cythereis villosa*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 42.

*Cythere villosa*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 411, pl. xxix. figs. 28-32 ; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 157, pl. iii. figs. 7 13.

**Cythere viridis**, Müller, 1785.

Raised beaches and Glacial clays,  
Scotland, Ireland, Norway ; Recent,  
Norway, Britain, Ireland.

*Cythere viridis*, Müller, 1785, Entomostraca, p. 64, tab. vii. figs. 1, 2; G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 30; Brady, 1868, Tr. Linn. Soc. vol. xxvi. p. 397, pl. xxviii. figs. 40, 41, 57, 58, 59, pl. xxxviii. fig. 8; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 147, pl. iii. figs. 26-28.

**Cythere Wetherellii**, Jones, 1854.

Upper Eocene, Isle of Wight.

*Cythere Wetherellii*, Jones, 1854, Quart. Journ. Geol. Soc. vol. x. p. 161, t. iii. fig. 9; id. 1856, Tert. Entom., Mon. Pal. Soc. p. 26, pl. iv. fig. 15, pl. vi. figs. 16 a-d.

**Cythere Woodiana**, Jones, 1856.

Pliocene, Suffolk.

*Cythere Woodiana*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 29, pl. iii. figs. 2 a-g.

**Cythere Wrightiana**, Jones and Holl, 1868.

Carboniferous Limestone,  
Chair of Kildare, Ireland.

*Cythere Wrightiana*, Jones and Holl, 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 57, pl. vii. figs. 5 a, 5 b.

**Cythere**, sp., Jones, 1865.

Rhætic, Somerset.

*Cythere*, sp., Salter and Woodward, 1865, Cat. & Chart Foss. Crust. p. 21, fig. 88.

**CYTHEREIS**, Jones, 1849.

*Cythereis*, Jones, 1849, Mon. Pal. Soc., Entomos. p. 14.

*Distribution.* Tertiary. Recent.

**Cythereis antiquata**, Baird, 1850. Glacial Clay, raised beaches, Britain ; Recent, Britain, Levant, &c.

*Cythereis antiquata*, Baird, 1850, Brit. Entom. p. 176, tab. xx. fig. 2.

*Cythere antiquata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 417, pl. xxx. figs. 17-23; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 170, pl. xii. figs. 8-10.

**Cythereis**, sp., Jones, 1856.

Lower Eocene, Thanet Sands, Kent.

*Cythereis*, sp., Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 40, pl. vi. fig. 17.

**Cythereis Whiteii**, Baird, 1850.

Glacial, Ireland ; Recent,  
Britain, Levant.

*Cythereis Whiteii*, Baird, 1850, Brit. Entom. p. 175, t. xx. figs. 3, 3 a.

*Cythere Whiteii*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 416, pl. xxx. figs. 21-24; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 169, pl. xii. figs. 1-3.



**CYTHERELLA**, Jones, 1849.

*Cythere*, Münster, 1830, Jahrbuch f. Min.; Cornuel, 1846, Mém. Soc. Géol. France.

*Cytherina*, Lyell and Lonsdale, 1838, Elements of Geology; Roemer, 1838, Jahrbuch f. Min.; id. 1840, Verstein. norddeutsch. Kreid.; Reuss, 1845, Verstein. böhm. Kreid.; Williamson, 1847, Transact. Manchest.

*Cytherina* and *Cypridina*, Bosquet, 1847, Mém. Soc. Roy. Liège.

*Cytherella*, Jones, 1849, Mon. Pal. Soc., Entomos. p. 28.

*Distribution.* Cretaceous to Tertiary.

**Cytherella aspera**, Jones, 1867.

Lias, Weston, near Bath.

*Cytherella aspera*, Jones, 1867, Quart. Journ. Geol. Soc. vol. xxiii. pp. 467, 497, 503, 509.

**Cytherella compressa**, Münster, 1830.

Tertiary, England, Europe :  
Recent, Australia (?), Norway.

*Cythere compressa*, Münster, 1830, Jahrb. f. Min. &c. p. 64; id. 1835, Neues Jahrb. &c. p. 445.

*Cytherina compressa*, Roemer, 1838, Neues Jahrb. &c. p. 517, t. vi. fig. 14.

*C. aciculata*, Roemer, 1838, Neues Jahrb. t. vi. fig. 21 (according to M. Bosquet).

*Cytherella compressa*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 54, pl. v. figs. 21, 23.

**Cytherella compressa**, var. **Beyrichii**, Bornemann.

Lower Eocene,

London and Germany.

*Cytherina Beyrichi*, Bornemann, Zeitsch. deutsch. geol. Ges. vii. p. 354, t. xx. fig. 1.

*Cytherella Beyrichii*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 55, pl. v. fig. 18.

**Cytherella compressa**, var. **intermedia**, Bornemann, Zeitsch. deutsch. geol. Ges. vii. p. 355, t. xx. fig. 3; Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 55, pl. v. fig. 19.**Cytherella ? inflata**, Münster, sp., 1830.

Carb. Shale, Campsie,  
Craigenglen, Dockra, Scotland; Carb.  
Limestone, Visé, Belgium.

*Cythere ? inflata*, Münster, sp. 1830, Jahrb. f. Min. p. 65. no. 17.

*Cytherella ? inflata*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xv. p. 408, pl. xx. figs. 8 a-8 e.

**Cytherella inornata**, McCoy, 1844.

Carb. Shales, Permian, Durham.

*Cythere inornata*, McCoy, 1844, Syn. Char. Carb. Foss. p. 167, pl. xxiii. fig. 18.

*Cythere (Cytherella ?) inornata*, Jones, 1850, in King's Mon. Perm. Foss., Mon. Pal. Soc. pl. xviii. fig. 9; Jones & Kirkby, 1859, Trans. Tynes. Fieldclub, vol. iv. p. 160, pl. xi.

*Cytherella inornata*, Richter, Zeitsch. deutsch. geolog. Gesellschaft, Heft viii. p. 529, pl. xxvi. figs. 6 & 7.

**Cytherella Londiniensis**, Jones, 1856.

Lower Eocene, London.

*Cytherella Londiniensis*, Jones, 1856, Tert. Entomos., Mon. Pal. Soc. p. 55, pl. v. fig. 19.

**Cytherella Mantelliana**, Jones, 1849.

Chalk-marl, Charing.

*Cytherella ? Mantelliana*, Jones, 1849, Cret. Entom., Mon. Pal. Soc. p. 32, t. vi. figs. 22 a-c.

**Cytherella Muensteri**, Roemer, 1838. Tertiary, England, Europe, N. America ; Cretaceous, England, Europe : Recent, Australia, Norway.

*Cytherina Muensteri*, Roemer, 1838, Neues Jahrb. f. Min. &c. p. 516, t. vi. fig. 13.

*Cythere truncata*, Bosquet, Mém. Soc. Roy. Liège, iv. p. 357, t. i. fig. 2.

*C. (Cytherella) truncata*, Jones, Cret. Entoms. p. 30, t. vii. fig. 35.

*Cytherella Münsteri*, Bosquet, 1852, Mém. Couron. Acad. Belg. xxiv. p. 13, t. i. fig. 2 ; Jones, Tert. Entom., Mon. Pal. Soc., p. 56, pl. v. figs. 12 a, 12 b, 13 ; id. 1870, Geol. Mag. vol. vii. p. 159.

**Cytherella Muensteri**, var. *rectipunctata*, Jones, 1870, Geol. Mag. vol. vii. p. 157.

**Cytherella ovata**, Roemer, sp., 1840. Chalk, S.E. of England ; Red Chalk, Flamborough ; Chalk-marl, Charing, Dover ; Gault, Folkestone, &c. ; Greensand, Warminster ; Lower Greensand and Chalk, France ; Chalk, Macstricht, Bohemia, Saxony, N. Germany, &c.

*Cytherina*, Lyell and Lonsdale, 1838, Elem. Geol. p. 55, fig. 19.

*Cytherina ovata*, Roemer, 1840, Verst. Kreid. p. 104. no. 4, pl. xvi. fig. 21 ; Reuss, 1845, Verstein. böhm. Kreid. p. 16. no. 6, pl. v. fig. 35.

*Cytherella ovata*, Jones, 1849, Cretac. Entomos., Mon. Pal. Soc. p. 28, t. vii. figs. 24 a-i ; Bosquet, 1854, Mém. C. C. Géol. Néerl. ii. p. 55, pl. viii. figs. 1 a-f.

**Cytherella simplex**, Jones and Kirkby, 1867. Carb. series, Raes Gill.

*Cytherella simplex*, J. & K. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 218 ; id. Cat. Western Scot. Foss. p. 44.

**Cytherella Williamsoniana**, Jones, 1849. Chalk, S.E. England ; Chalk-marl, Charing, Dover ; Gault, Folkestone, &c.

*Cytherella Williamsoniana*, Jones, 1849, Cret. Entom., Mon. Pal. Soc. p. 31, t. vii. figs. 26 a-i.

**Cytherella Williamsoniana**, var. *granulosa*, Jones, 1849, ib. fig. 26 i. Chalk, Norwich.

### CYTHERELLINA, Jones and Holl, 1869.

*Beyrichia*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 90.

*Cytherellina*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 215.

*Distribution.* Silurian.

**Cytherellina siliqua**, Jones, 1869. Upper Ludlow Beds, Hales End, near Malvern.

*Beyrichia siliqua*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 90, pl. v. fig. 22.

*Cytherellina siliqua*, Jones, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 216, pl. xiv. figs. 1-6.

**Cytherellina siliqua**, var. *tersa*, Jones, 1869. Wenlock Limest., Malvern.

*Cytherellina siliqua*, var. *tersa*, Jones, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 217, pl. xiv. fig. 3.

**Cytherellina siliqua**, var. *ovata*, Jones, 1869. Wenlock Shale, Malvern.

*Cytherellina siliqua*, var. *ovata*, Jones, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. pl. xiv. fig. 4.

**CYTHERIDEA**, Bosquet, 1850.

*Cytheridea*, Bosquet, 1850, Entom. Foss. Terr. Tert. p. 37; Jones, 1854, Quart. Journ. Geol. Soc. vol. x. p. 169.

*Distribution.* Cretaceous to Tertiary. Recent, marine.

**Cytheridea debilis**, Jones, 1856.

Upper Eocene, Isle of Wight;  
Recent, Norway.

*Cytheridea debilis*, Jones, 1856, Tert. Entomos., Mon. Pal. Soc. p. 43, pl. v. fig. 5, pl. vi. fig. 13.

**Cytheridea elongata**, Brady, 1868.

Post-Tertiary, Great Britain and  
Ireland; Recent, Great Britain, Ireland, Bay of Biscay.

*Cythere angustata*, Baird, 1850, Brit. Entom. p. 172, pl. xxi. fig. 6.

*Cytheridea elongata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 421, pl. xxviii. figs. 13-16, pl. xl. fig. 6; Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 181, pl. ix. figs. 10-13.

**Cytheridea?** *inornata*, Brady, Crosskey, and Robertson, 1874.

Post-Tertiary, Scotland.

*Cytheridea inornata*, Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 181, pl. vii. figs. 3-6.

**Cytheridea lacustris**, G. O. Sars, 1863.

Post-Tertiary, Great Britain;  
Recent, Great Britain, Norway.

*Cythere lacustris*, G. O. Sars, 1863, Om en i Sommeren 1862 foretagen Zoologisk Reise, p. 30.

*Cytheridea lacustris*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 427, pl. xxvi. figs. 18-21, pl. xl. fig. 2; Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 179, pl. vi. figs. 16-20.

**Cytheridea littoralis**, Brady, 1868.

Pleistocene, Essex and Kent;  
Recent, Britain, Guernsey, The Levant, Sea of Azoff.

*Cyprideis torosa*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 21, pl. ii. fig. 1e.

*Cytheridea torosa*, Brady (pars), 1868, Trans. Linn. Soc. vol. xxvi. p. 425.

*C. littoralis*, Brady, 1868, Nat. Hist. Trans. North. & Durham (pages 6-8 of extract).

**Cytheridea Muelleri**, Münster, 1830.

Tertiary, England, Europe,  
Australia: Recent, Holland, Australia.

*Cythere Muelleri*, Münster, 1830, Jahrb. f. Min. &c. p. 63; id. 1835, Neues Jahrb. &c. p. 446.

*Cytheridea Muelleri*, Bosquet, Mém. Couron. Acad. Belg. xxiv. p. 39, t. ii. fig. 4; Jones, 1854, Quart. Journ. Geol. Soc. vol. x. p. 160, t. iii. fig. 7; id. 1856, Mem. Geol. Surv. p. 158, t. vii. fig. 28; id. 1856, Tert. Entom., Mon. Pal. Soc. p. 41, pl. v. figs. 4 a-c, & 5, pl. vi. figs. 10 a, 10 b, & 11-13.

**Cytheridea Muelleri**, var. *torosa*, Jones, 1854.

Upper Eocene,  
Hempstead Cliff; Lower Eocene, Woolwich.

*Cythere (Cythereidea) Muelleri*, var. *torosa*, Jones, 1854, Quart. Journ. Geol. Soc. vol. x. p. 161, t. iii. fig. 8; id. 1856, Mem. Geol. Surv. p. 158, t. vii. fig. 27; id. 1856, Tert. Entomos., Mon. Pal. Soc. p. 42, pl. vi. fig. 12.

**Cytheridea papillosa**, Bosquet, 1852. Glacial, raised beaches, Scotland and Norway ; Tertiary, France and Belgium :  
Recent, Britain, Norway, &c.

*Cytheridea papillosa*, Bosquet, 1852, Entom. foss. des terre Tert. de la France, p. 42, pl. ii. figs. 5 a-d; Brady, 1865, Trans. Zool. Soc. vol. v. p. 370, pl. lviii. figs. 8 a-g; id. 1866, Tr. Linn. Soc. vol. xxvi. p. 423, pl. xxviii. figs. 1-6, pl. xl. fig. 1; Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 175, pl. vi. figs. 12-15.

*Cythere Bradii*, Norman, 1864, Brit. Assoc. Rep. p. 192.

*C. debilis*, Norman, 1865, Nat. Hist. Trans. Northumb. & Durham, vol. i. p. 15, pl. v. figs. 5-8, and note, p. 28.

*Cyprideis Bairdii*, 1865, Sars, Oversigt af Norges marine Ostracoder, p. 52.

**Cytheridea perforata**, Roemer, sp., 1838. Upper Eocene, Colwell Bay ; Middle Eocene, Barton ; Chalk-marl, Kent ; Gault, Kent ; Greensand, Blackdown.

*Cytherina perforata*, Roemer, 1838, N. Jahrb. p. 516, pl. vi. fig. 11.

*Cythere Hilsenana*, Jones (non Roemer), 1849, Mon. Cret. Ent. p. 10, pl. i. fig. 1.

*Bairdia perforata*, Bosquet, 1852, Mém. Couron. Acad. Belg. vol. xxiv. p. 24, pl. i. fig. 8.

*Cytheridea Jonesiana*, Bosquet, 1854, Mém. Cour. Carte Géol. Néerl. vol. ii. p. 74, pl. viii. fig. 5.

*Cytheridea perforata*, Jones, 1856, Mon. Tert. Entom. p. 44, pl. iv. figs. 14 a-e.

**Cytheridea perforata**, var. *a. glabra*, Jones, 1856. Lower Eocene, London.

*Cytheridea perforata*, var. *a. glabra*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 46, pl. v. figs. 24a, 24b.

**Cytheridea perforata**, var. *β. insignis*, Jones, 1856. Lower Eocene, London.

*Cytheridea insignis*, Jones, 1856, *op. cit.* pl. vi. figs. 3 a-3 c.

**Cytheridea pinguis**, Jones, 1856. Pliocene, Suffolk.

*Cytheridea pinguis*, Jones, 1856, Tert. Entomos., Mon. Pal. Soc. p. 43, pl. xi. figs. 4 a-4 h.

**Cytheridea punctillata**, Brady, 1865. Post-Tertiary, Great Britain, Ireland ; Recent, Britain, Norway, Spitzbergen, &c.

*Cytheridea punctillata*, Brady, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 189, pl. ix. figs. 9-11 ; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 424, pl. xxvi. figs. 35-38, pl. xxviii. figs. 17-20 ; Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 177, pl. vi. figs. 1-11.

*Cyprideis proxima*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 54.

**Cytheridea Sorbyana**, Jones, 1856. Post-Tertiary, Great Britain, Norway, and Canada ; Recent, Norway, Scotland.

*Cytheridea Sorbyana*, Jones, 1856, Mon. Tert. Entom. p. 44, pl. iv. figs. 6 a-6 e ; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 428, pl. xxix. figs. 1-6 ; Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 180, p. vii. figs. 7-12.

*C. dentata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 56.

*C. inermis*, G. O. Sars, 1865, *ibid.*

**Cytheridea torosa**, Jones, 1850. Post-Tertiary, England; Recent Great Britain, Ireland, Levant.

*Candona torosa*, Jones, 1850, Ann. & Mag. Nat. Hist. 2nd ser. vol. vi. p. 27, pl. iii. fig. 6.

*Cyprideis torosa*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 21, pl. ii. figs. 1a, 1i, and woodcut fig. 2, p. 16.

*Cytheridea torosa*, Brady and Robertson, 1874, Ann. & Mag. Nat. Hist. 4th ser. vol. vi. p. 21, pl. viii. figs. 6, 7; Brady, Crossk. and Robertson, 1874, Mon. Pal. Soc. p. 178, pl. xv. figs. 11, 12.

**Cytheridea torosa**, var. *teres*, Brady and R., 1870. Post-Tertiary, Great Britain and Ireland; Recent, Great Britain, Ireland, Norway, Sea of Azoff, &c.

*Cyprideis torosa*, Brady, 1864, Trans. Tynes. Nat. Field-club, vol. vi. p. 108, pl. iii. figs. 11-23; id. 1864, Ann. & Mag. Nat. Hist. 3rd ser. vol. xiii. p. 62, pl. iv. figs. 11-23; G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 51.

*Cytheridea torosa*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 425, pl. xxviii. figs. 7-12, pl. xxxix. fig. 5.

*C. littoralis*, Brady, 1868, Nat. Hist. Trans. Northumb. & Durham, vol. iii. p. 125.

*C. torosa*, var. *teres*, Brady and Robertson, 1870, Ann. & Mag. Nat. Hist. 4th ser. vol. vii. p. 21; Brady, Crossk. and Robertson, 1874, Mon. Pal. Soc. p. 178, pl. vii. figs. 1, 2.

### CYTHERIDEIS, Jones, 1856.

*Cytherideis*, Jones, 1856, Mem. Geol. Surv. p. 158.

*Distribution.* Permian, Cretaceous, and Tertiary. Recent, marine.

**Cytherideis angusta**, Jones, 1856. Chalk. Gravesend; Gault, Folkestone; Tertiary and Cretaceous, Europe.

*Cythere angusta*, Münster, 1830, Jahrb. p. 63, n. 10; Jones 1849, Mon. Pal. Soc. p. 26, t. vi. figs. 18a-f.

*Cytherideis angusta*, Jones, 1856, Mon. Pal. Soc. p. 52.

**Cytherideis Colwellensis**, Jones, 1856. Middle Eocene, Isle of Wight.

*Cytherideis Colwellensis*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 49, pl. iv. figs. 13a-13c, 20a-20c. ("This may be a *Cythere*."—T. R. Jones, Geol. Mag. 1870, vol. vii. p. 157.)

**Cytherideis? ren**, Jones, 1856. Pliocene, Suffolk.

*Cytherideis? ren*, Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 51, pl. iv. figs. 5a, 5b; id. Geol. Mag. 1870, vol. vii. p. 157.

**Cytherideis? Jonesiana**, Kirkby, 1858. Permian, Durham; Unter-Zechstein of Bleichenbach and Selters.

*Bairdia gracilis*, Reuss, 1854, Jahres. wetterau. Gesell. p. 65, fig. 3.

*Bairdia Jonesiana*, Kirkby, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. ii. p. 432, pl. xi. figs. 1, 2.

*Cythere (Cytherideis) Jonesiana*, Kirkby, 1859, Trans. Tynes. Nat. Field-club, vol. iv. p. 151, pl. x. figs. 1, 2.

*Cythere Jonesiana*, Kirkby, 1859, *ibid.* Append. p. 168, pl. xi. figs. 24a-24d & 25a-25d.

- Cytherideis**?, sp., Jones, 1856. Lower Eocene, Kent.  
*Cytherideis*?, sp., Jones, Tert. Entomos., Mon. Pal. Soc. 1856. p. 49, pl. vi. fig. 15.
- Cytherideis subspiralis**, Brady, Crossk. and Rbts., 1874. Post-Tertiary, Scotland.  
*Cytherideis subspiralis*, B., C. & R. Mon. Pal. Soc. p. 211, pl. x. figs. 16, 17.
- Cytherideis subulata**, Brady, 1863. Glacial, Scotland ; Recent, Britain, Cape Verd, &c.  
*Cythere flarida*, Baird, 1850, Brit. Entom. p. 168, t. xxi. figs. 12, 12 a.  
*Cytherideis subulata*, Brady, 1868, Mon. Entom., Tr. Linn. Soc. vol. xxvi. p. 454, pl. xxxv. figs. 43-46.
- Cytherideis trigonalis**, Jones, 1850. Pleistocene, Essex ; Recent, Pegwell Bay, Kent.  
*Cythere trigonalis*, Jones, 1850, Annals & Mag. Nat. Hist. 2nd ser. vi. p. 28, t. iii. fig. 5.  
*Cytherideis trigonalis*. Jones, 1856, Tert. Entomos., Mon. Pal. Soc. p. 47, pl. xi. figs. 2 a-2 h.
- Cytherideis trigonalis**, var. *lævis*, Jones, 1856. Pleistocene, Grays, Essex.  
 Jones, 1856, Mon. Pal. Soc. p. 47.
- Cytherideis tuberculata**, Jones, 1856. Pliocene, Red Crag, Essex and Suffolk.  
*Cytherideis tuberculata*, Jones, 1856, Tert. Entomos., Mon. Pal. Soc. p. 47, pl. ii. figs. 3 a-3 f.
- Cytherideis**? *unicornis*, Jones, 1856. Upper Eocene, Isle of Wight.  
*Cytherideis*? *unicornis*, Jones, 1856, Mem. Geol. Surv. p. 158, t. vii. figs. 24-26 ; id. 1856, Tert. Entomos., Mon. Pal. Soc. p. 48.
- Cytherideis**? *unisulcata*, Jones, 1856. Upper Eocene, Isle of Wight.  
*Cytherideis*? *unisulcata*, Jones, 1856, Mem. Geol. Surv. p. 157, t. 7. fig. 23 ; id. 1856, Tert. Entomos., Mon. Pal. Soc. p. 48, pl. iv. fig. 10.

#### CYTHEROPSIS, M'Coy, 1854.

- Ceratiocaris*?, M'Coy, 1855, Pal. Foss. p. 138.  
*Cythere*?, Salter, 1855, Pall. Foss. p. ii, Appendix.  
*Cytheropsis*, H. Woodw. & Salter, 1866, Cat. & Chart Foss. Crust. p. 20.  
*Distribution*. Lower Silurian, Wales and Scotland.
- Cytheropsis Aldensis**, M'Coy, 1855. Lower Silurian, Aldens, S. Scotland.  
*Cytheropsis Aldensis*, M'Coy, 1855, Pal. Foss. pl. i. L. fig. 2 ; H. Woodw. & Salter, 1866, Cat. & Chart Foss. Crust. p. 20.
- Cytheropsis umbonata**, Salter, 1855. Lower Silurian, Wales.  
*Cythere*? *umbonata*, Salter, 1855, Pall. Foss. Woodw. Mus. Appendix, p. ii, t. i. E. fig. 6.  
*Ceratiocaris*? *umbonata*, M'Coy, 1855, Pal. Foss. p. 138.  
*Cytheropsis umbonata*, Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 20, fig. 73.

**CYTHEROPTERON**, G. O. Sars, 1865.

*Cytheropteron*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac.: Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 477; Brady, Crossk. & Roberts. 1874, Mon. Pal. Soc. p. 202.

*Cytherine*, Williamson, 1847, Trans. Manchester Phil. Soc. viii. p. 82.

*Cythere*, Jones, 1849, Cret. Entom. Mon. Pal. Soc. p. 8; Reuss, Zeitsch. deutsch. geol. Gesell. vii. p. 279; Norman, 1865, Nat. Hist. Trans. Northumb. & Durham, vol. i. p. 19; Brady, 1866, Trans. Zool. Soc. vol. v. p. 381.

*Distribution*. Cretaceous to Post-Tertiary. Recent, marine.

**Cytheropteron angulatum**, Brady and R. 1872. Post-Tertiary,  
Great Britain, Canada; Recent, Scotland.

*Cytheropteron angulatum*, B. & R. 1872, Ann. & Mag. Nat. Hist. ser. 4, vol. ix. p. 62, pl. ii. figs. 7, 8; B., C. & R. 1874, Mon. Pal. Soc. p. 206, pl. viii. figs. 37-40.

**Cytheropteron arcuatum**, Brady, Crossk. and R. 1874. Post-Tertiary,  
Scotland and Ireland; Recent, Baffin's Bay.

*Cytheropteron vespertilio*, Brady, 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 33, pl. v. figs. 6, 7.

*C. arcuatum*, Brady, Crossk. & Roberts. 1874, Mon. Pal. Soc. p. 203, pl. viii. figs. 16-18, & pl. xiv. figs. 19-22.

**Cytheropteron inflatum**, Brady, Crossk. and R. 1874. Post-Tertiary,  
Scotland, Canada; Recent, Baffin's Bay, N. Atlantic.

*Cytheropteron inflatum*, B., C. & R. 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 33, pl. v. figs. 8-10 (figured but not described); B., C. & R. 1874, Mon. Pal. Soc. p. 204, pl. viii. figs. 24-27, pl. xiv. figs. 26-29.

**Cytheropteron latissimum**, Norman, 1865. Post-Tertiary. Britain,  
Norway, Canada; Recent, Great Britain, Ireland, Norway, &c.

*Cythere latissimum*, Norman, 1865, Nat. Hist. Trans. Northumb. & Durham, vol. i. p. 19, pl. vi. figs. 5-8; Brady, 1866, Trans. Zool. Soc. vol. v. p. 381, pl. lxii. figs. 4 a-c.

*Cytheropteron convexum*, G. O. Sars, 1864, Overs. Norg. mar. Ostrac. p. 80.

*C. latissimum*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 488, pl. xxxiv. figs. 26-30; Brady, Crossk. & Roberts. 1874, Mon. Pal. Soc. p. 202, pl. viii. figs. 19-23.

**Cytheropteron Montrosiense**, Brady, Crosskey, and Robertson. 1874.  
Post-Tertiary. Great Britain, Ireland, and Norway;  
Recent, Baffin's Bay.

*Cytheropteron Montrosiense*, B., C. & R. 1868, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 33, pl. v. figs. 1-5 (figured but not described); B., C. & R. 1874, Mon. Pal. Soc. p. 205, pl. viii. figs. 28-36, pl. xiv. figs. 13-16.

**Cytheropteron nodosum**, Brady, 1868. Glacial, Scotland and  
Ireland; Recent, Britain.

*Cytheropteron nodosum*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 488, pl. xxxiv. figs. 31-31; Brady, Crossk. & Roberts. 1874, Mon. Pal. Soc. p. 203, pl. viii. figs. 12-15.

**Cytheropteron rectum**, Brady, 1868. Post-Tertiary, Scotland ;  
Recent, Shetland, W. of Ireland.

*Cytheropteron rectum*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 476; Brady & Robts. 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 372, pl. xx. figs. 6-8; B., C. & R. 1874, Mon. Pal. Soc. p. 206, pl. xiv. figs. 17, 18.

**Cytheropteron triangulare**, Reuss, sp. L. Eocene, London ;  
Cretaceous, Germany.

*Cythere triangularis*, Reuss, Zeitsch. deutsch. geol. Gesell. vii. p. 279, t. x. fig. 3; Jones, 1856, Tert. Entom., Mon. Pal. Soc. p. 25, pl. vii. figs. 5 a-g. *Cytheropteron triangulare*, Sars, 1865, Overs. Norg. mar. Ostrac.

**Cytheropteron umbonatum**, Williamson, sp. 1847. U. Chalk, Norwich ;  
Chalk, Woolwich ; Chalk-marl, Dover and Charing.

*Cytherine umbonatum*, Williamson, 1847, Trans. Manchester Phil. Soc. vol. viii. p. 82, pl. iv. fig. 78. *Cythere umbonata*, Jones, 1849, Cret. Entomotr., Mon. Pal. Soc. t. ii. fig. 3 a-g. *Cytheropteron umbonatum*, Sars, 1865, Overs. Norg. mar. Ostrac.

### CYTHERURA, G. O. Sars, 1865.

*Cythere*, Müller, 1785, Entomotraca, p. 24; Baird, 1838, Mag. Zool. & Bot. vol. ii. p. 143; Jones, 1849, Cret. Entom. p. 32; Zenker, 1854, Anat. Studien über die Krebsst. p. 84.

*Cytherura*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 71; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 444; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 191.

*Distribution.* Gault to Post-Tertiary. Recent, marine.

**Cytherura acuticostata**, G. O. Sars, 1865. Post-Tertiary, Ireland,  
Scotland, and Norway ; Recent, Great Britain, Ireland,  
Holland, Norway.

*Cytherura acuticostata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 76; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 445, pl. xxxii. figs. 1-11; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 199, pl. xvi. figs. 1-3.

**Cytherura angulata**, Brady, 1868. Post-Tertiary, Ireland, Scotland,  
Wales, and Norway ; Recent, Great Britain.

*Cytherura angulata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 442, pl. xxxii. figs. 39-42; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 197, pl. xi. figs. 48-51, pl. xii. fig. 14.

**Cytherura appendiculata**, Jones, 1849. Gault, Folkestone,

*Cytherella appendiculata*, Jones, 1849, Cret. Entom., Mon. Pal. Soc. p. 32, t. vi. figs. 21 a, b.

**Cytherura attenuata**, Jones, sp., 1856. M. Eocene. Isle of Wight.

*Cythere attenuata*, Jones, 1856, Mon. Pal. Soc. p. 28, pl. v. fig. 11.



- Cytherura cellulosa**, Norman, 1865.      Glacial, Norway, Scotland ;  
Recent, Norway, Britain.  
*Cytherura nana*, Sars, 1865, Overs. Norg. mar. Ostrac. p. 78.  
*Cythere cellulosa*, Norman, 1865, Nat. Hist. Trans. Northumb. & Durh. vol. i.  
p. 22, pl. v. figs. 17-20, pl. vi. fig. 17.  
*Cytherura cellulosa*, Brady, 1868, Tr. Linn. Soc. vol. xxvi. p. 446, pl. xxix.  
figs. 47-50, 60 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 200, pl. xi.  
figs. 5, 6.
- Cytherura clathrata**, Sars, 1865.      Glacial, Norway and Britain ;  
Recent, Norway and Britain.  
*Cytherura clathrata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 77 ; Brady,  
1868, Tr. Linn. Soc. vol. xxvi. p. 446, pl. xxix. figs. 43-46 ; Brady,  
Crossk. & Robts. 1874, Mon. Pal. Soc. p. 201, pl. xi. figs. 1-4.
- Cytherura ? complanata**, Brady, Crossk. and R. 1874.      Post-Tertiary,  
Scotland, Ireland.  
*Cytherura ? complanata*, B., C. & R. 1874, Mon. Pal. Soc. p. 194, pl. xi.  
figs. 19, 20.
- Cytherura compressa**, Brady, Crossk. and R. 1874.      Post-Tertiary,  
Scotland.  
*Cytherura compressa*, B., C. & R. 1874, Mon. Pal. Soc. p. 195, pl. xi. figs. 21-23.
- Cytherura concentrica**, Brady, Crossk. and R. 1874.      Post-Tertiary,  
Scotland ; Recent, Shetland, Gulf of St. Lawrence.  
*Cytherura concentrica*, B., C. & R. 1874, Mon. Pal. Soc. p. 194, pl. xi. figs. 7, 8,  
pl. xv. fig. 21.
- Cytherura cornuta**, Brady, 1868.      Post-Tertiary, West Tarbert  
Silt, Scotland, Norway ; Recent, Britain, Levant, &c.  
*Cytherura cornuta*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 445, pl. xxxii.  
figs. 12-15 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 190, pl. xiii.  
figs. 23-25.
- Cytherura cuneata**, Brady, 1868.      Post-Tertiary, West Tarbert,  
Scotland ; Recent, Great Britain, Ireland, Levant.  
*Cytherura cuneata*, Brady, 1868, Mon. Rec. Brit. Ostrac., Tr. Linn. Soc. vol. xxvi.  
p. 442, pl. xxxii. figs. 35-38, 63 ; Brady, Crossk. & Robts. 1874, Mon. Pal.  
Soc. p. 196, pl. xi. figs. 42 & 47, pl. xiii. figs. 36, 37.
- Cytherura flavescens** Brady, 1869.      Post-Tertiary, Scotland  
Recent, Britain, Holland.  
*Cytherura flavescens*, Brady, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 49,  
pl. viii. figs. 13-15 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 193,  
pl. xvi. figs. 7, 8.
- Cytherura gibba**, Müller, 1785.      Post-Tertiary, Scotland and  
Ireland ; Recent, Scotland and Ireland.  
*Cythere gibba*, Müller, 1785, Entomostraca. p. 24, pl. vii. figs. 10-12.  
*C. gibbera*, idem, ibidem ; Lilljeborg, 1853, De Crustaceis, p. 167, pl. xix.  
figs. 1, 2.  
*C. gibba*, Zenker, 1854, Anat. Studien über die Krebsth. p. 84, pl. v. D.  
*Cytherura gibba*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 70 ; Brady,  
1868, Trans. Linn. Soc. vol. xxvi. p. 444, pl. xxxii. figs. 68-70 ; Brady,  
Crossk. & Robts. 1874, Mon. Pal. Soc. p. 198, pl. xiii. figs. 26-29.

- Cytherura nigrescens**, Baird, 1838.                      Glacial, Norway, Britain ;  
Recent, Norway, Britain.  
*Cythere nigrescens*, Baird, 1838, Mag. Zool. & Bot. vol. ii. p. 143, pl. v. fig. 27 ;  
Baird, 1850, Brit. Entomos. p. 171, tab. xxi. figs. 4, 4 a.  
*Cytherura nigrescens*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 71 ; Brady,  
1868, Tr. Linn. Soc. vol. xxvi. p. 440, pl. xxxii. figs. 50-55, pl. xxxix.  
fig. 7 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 192, pl. xi.  
figs. 28-32, pl. xii. fig. 13.
- Cytherura producta**, Brady, 1868.                      Post-Tertiary, S. Wales ;  
Recent, Great Britain and Ireland.  
*Cytherura producta*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 443, pl. xxxii.  
figs. 60, 61 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 198, pl. xiii.  
figs. 30-33.
- Cytherura pumila**, Brady, Crossk. & Robts., 1874.                      Post-Tertiary,  
Scotland ; Recent, Shetland, Gulf of St. Lawrence.  
*Cytherura pumila*, B., C. & R. 1874, Mon. Pal. Soc. p. 193, pl. xi. figs. 33-35.
- Cytherura quadrata**, Norman, 1868.                      Post-Tertiary, S. Wales and  
Ireland ; Recent, Shetland, S. Wales.  
*Cytherura quadrata*, Norman, 1868, Brit. Assoc. Report, Dredging Shetland  
Isles, p. 255 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 196, pl. xiii.  
figs. 34, 35.
- Cytherura Robertsoni**, Brady, 1868.                      Post-Tertiary, Scotland,  
Canada ; Recent, Great Britain.  
*Cytherura Robertsoni*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 444, pl. xxxii.  
figs. 16-18 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 221.
- Cytherura Sarsii**, Brady, 1868.                      Post-Tertiary, Scotland, Canada ;  
Recent, Scotland.  
*Cytherura Sarsii*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 442, pl. xxxii.  
figs. 39-42 ; Brady, Crossk. & Robts. 1874, Mon. Pal. Soc. p. 197, pl. xi.  
figs. 24-27, pl. xiii. figs. 18, 19.
- Cytherura similis**, Sars, 1865.                      Post-Tertiary, Scotland, Norway ;  
Recent, Norway, Britain.  
*Cytherura similis*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 72 ; Brady,  
1868, Trans. Linn. Soc. vol. xxvi. p. 442, pl. xxxii. figs. 56-59 ; Brady, Crossk.  
& Robts. 1874, Mon. Pal. Soc. p. 192, pl. xi. figs. 16-18, pl. xii. fig. 16.
- Cytherura striata**, Sars, 1865.                      Glacial, Norway, Scotland, Ireland ;  
Recent, Britain, Norway.  
*Cytherura striata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 441, pl. xxxii.  
figs. 26-29, 62, 64, 65.
- Cytherura undata**, Sars, 1865.                      Glacial, Scotland, Ireland, and  
Norway ; Recent, Baffin's Bay, Britain, &c.  
*Cytherura humilis*, Brady, 1866, Brit. Assoc. Rept. p. 210.  
*C. undata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 443, pl. xxxii.  
figs. 43-49, 66.

**DARWINELLA**, Brady and Robertson, 1870.

*Polycheles*, Brady and Robertson, 1870, Ann. & Mag. Nat. Hist. vol. vi. p. 25.

*Darwinella*, Brady and Robertson, 1872, ib. vol. ix. p. 50.

*Distribution.* Post-Tertiary and Recent.

**Darwinella Stevensoni**, Brady and Robertson, 1870. Post-Tertiary,  
England; Recent, England, Ireland, and Holland.

*Polycheles Stevensoni*, B. & R. 1870, Ann. & Mag. Nat. Hist. vol. vi. p. 25,  
pl. vii. figs. 1-7, and pl. x. figs. 4-14.

*Darwinella Stevensoni*, B. & R. 1872, ib. vol. ix. p. 50; Brady, Crossk. & Robts.  
1874, Mon. Pal. Soc. p. 141, pl. ii. figs. 13-17.

**ENTOMIDELLA**, Jones, 1873.

*Entomis*, Jones, 1861, Mem. Geol. Surv. (map 32), p. 137.

*Leperditia*, Salter, 1866, Brit. Assoc. Rep. p. 285.

*Entomidella*, Jones, 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi. p. 416.

*Distribution.* Cambrian and Silurian.

**Entomidella buprestis**, Salter, 1866. Menevian, St. David's, Wales.

*Leperditia buprestis*, Salter, 1866, Rep. Brit. Assoc. p. 285.

*L. ? punctatissima*, Salter, 1867, Siluria, Appendix, p. 519.

*Entomis buprestis*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 183,  
pl. v. fig. 15.

*Entomidella buprestis*, Jones, 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi.  
p. 417.

**Entomidella divisa**, Jones, 1873. Silurian, Builth and Ludford.

*Entomis divisa*, Jones, 1861, Mem. Geol. Surv. (map 32), p. 137; Jones, 1870,  
Month. Micros. Journ. vol. iv. p. 185, pl. lxi. fig. 12.

*Entomidella divisa*, Jones, 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi.  
p. 416.

**ENTOMIS**, Jones, 1861.

*Cypridina*, De Koninck, 1841, Mém. Acad. R. Sc. Belg. vol. xiv. p. 18; G.  
Sandberger, 1842, Leonh. u. Bronn's Jahrb. p. 226; F. A. Römer, 1854,  
Palaeontographica, vol. iii.; Richter, 1856, Denksch. math.-nat. Cl. k.  
Akad. Wien, vol. xi.

*Entomis*, Jones, 1861, Mem. Geol. Surv. Gt. Brit. Geol. Edinburgh (map 32)  
p. 137; Jones and Kirkby, 1863, Geologist, vol. vi. p. 460; H. Woodw. &  
Salter, 1867, Cat. & Chart Foss. Crust. p. 20; Bigsby, 1868, Thesaurus  
Siluricus, p. 74; Barrande, 1872, Crust. Poiss. Sil. Bohême (extraits. &c.),  
p. 41.

*Distribution.* Silurian, Devonian, and Carboniferous.

**Entomis aciculata**, Jones, 1871. U. Silurian, Pentland Hills,  
Scotland.

*Entomis aciculata*, Jones, 1871, Rep. Brit. Assoc. Edinb. 1871, Trans. Sect.  
p. 93; id. 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi. p. 416.

**Entomis biconcentrica**, Jones, 1870. L. Carb., England and Ireland.

*Entomis biconcentrica*, Jones, 1870, Month. Micros. Journ. vol. iv. p. 185,  
pl. lxi. fig. 13; id. 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi. p. 415.

**Entomis impendens**, Haswell, 1865. U. Silurian, Pentland Hills, Scotland.

*Entomis impendens*, Haswell, 1865, Silur. Form. Pentland Hills, p. 38, pl. iii. fig. 11; Jones, 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi. p. 415.

**Entomis serratostrata**, G. Sandberger, 1842. Devonian, England, Europe.

*Cypridina serratostrata*, G. Sandb. 1842, Leonh. u. Bronn, Jahrb. p. 226; F. A. Römer, 1854, Palæontogr. iii.; Jones, 1854, in Morris's Catal. p. 104; Richter, 1856, Denkschr. Akad. Wien, vol. xi.; Ferd. Römer, 1856, in Bronn's Leth. Geogn. 3rd edit. vol. i. p. 532.

*Entomis serratostrata*, Römer and Godwin-Austen, 1857, Quart. Journ. Geol. Soc. vol. xiii. p. lxxxix.; H. Woodw. & Salter, 1867, Cat. & Chart Foss. Crust. p. 29, fig. 62; Jones, 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi. p. 414.

*Entomis* of the Cypridinen-Schiefer, Jones and Kirkby, 1863, Geologist, vol. vi. p. 160.

**Entomis tuberosa**, Jones, 1861. U. Silurian, Pentland Hills, Scotland; Ludlow, Shropshire, New S. Wales.

*Entomis tuberosa*, Jones, 1861, Mem. Geol. Surv. (map 32), p. 137, pl. ii. fig. 5; id. 1873, Ann. & Mag. Nat. Hist. 4th ser. vol. xi. p. 415.

### ENTOMOCONCHUS, M'Coy, 1839.

*Entomoconchus*, M'Coy, 1839, Journ. Geol. Soc. Dublin, vol. ii. p. 91.

*Cytherina*, De Koninck, 1841, Mém. Acad. Roy. Belg. vol. xiv. p. 16; Omalius, 1843, Précis élém. Géol. p. 515; Cumming, 1846, Quart. Journ. Geol. Soc. vol. ii. p. 322.

*Cythere*, Cumming, 1848, The Isle of Man, Appendix Q, p. 355; Dupont, 1863, Bull. Acad. Roy. Belg. 2nd ser. vol. xv. p. 110.

*Entomoconchus*, Jones and Kirkby, 1863, Geologist, vol. vi. p. 460.

*Distribution.* Carb. Limestone.

**Entomoconchus globosus**, Jones and Kirkby, 1874. Carb. Limest., Beith, Ayrshire.

*Entomoconchus globosus*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 52, pl. v. figs. 10 a-g.

**Entomoconchus orbicularis**, Jones and Kirkby, 1874. Carb. Limest., Little Island, Cork; Isle of Man.

*Entomoconchus orbicularis*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 52, pl. i. figs. 7 a-c.

**Entomoconchus Scouleri**, M'Coy, 1839. Carb. Limest., Ireland, England, Isle of Man, Belgium.

*Cypridiform shell*, J. Phillips, 1836, Illust. Geol. Yorks. pt. 2, pp. 240 & 251, pl. xxii. figs. 23, 24.

*Entomoconchus Scouleri*, M'Coy, 1839, Journ. Geol. Soc. Dublin, vol. ii. p. 91, pl. v. figs. a-e; id. 1844, Synops. Char. Carb. Foss. Ireland, p. 164, pl. xxiii. fig. 4; Morris, 1854, Catal. Brit. Foss. 2nd edit. p. 108; Jones & Kirkby, 1863, Geologist, vol. vi. p. 460; id. 1864, Brit. Assoc. Rep. for 1863, Trans. Sect. p. 80; id. Neues Jahrb. 1864, p. 54; id. Canad. Nat. & Geol. 1864, new ser. vol. i. p. 236; id. 1866, Ann. & Mag. N. H. 3rd ser. vol. xviii. pp. 41, 46, 48;

Jones, 1870, Monthly Micros. Journ. vol. iv. p. 185, pl. lxi. fig. 17; Jones and Kirkby, 1874, Mon. Pal. Soc. p. 49, pl. i. figs. 1-6.

*Cytherina Phillipsiana*, De Koninck, 1841, Mém. Acad. Roy. Belgique, vol. xiv. p. 16, fig. 13; id. 1843, D'Omalus's Précis élém. Géol. p. 515; Morris, 1843, Catal. Brit. Foss. p. 73; De Koninck, 1844, Descript. Anim. foss. Terr. Carb. Belg. p. 585, pl. lii. figs. 1a, b; Cumming, 1846, Quart. Journ. Geol. Soc. vol. ii. p. 322.

*Cythere Phillipsiana*, Cumming, 1848, The Isle of Man, Appendix Q, p. 355; Dupont, 1863, Bull. Acad. Roy. Belg. ser. 2, vol. xv. p. 110.

**Entomoconchus Scouleri**, var. **ovalis**, Jones & K., 1874. Carb. Limest., Clonaloy, Ireland.

*Entomoconchus Scouleri*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 49, pl. i. fig. 1.

### EUCY THERE. Brady, 1866.

*Cythere*, 1864, Norman, Brit. Assoc. Rep. p. 192.

*Cytheropsis*, 1865, Sars, Overs. Norg. mar. Ostrac. p. 58.

*Eucythere*, 1866, Brady, Mon. Entom. Trans. Linn. Soc. vol. xxvi. p. 430; Brady, Crossk. and Robertson, 1874, Mon. Pal. Soc. p. 183.

*Distribution*. Post-Tertiary. Recent, marine.

**Eucythere Argus**, Sars, 1865. Glacial, Scotland and Norway; Recent, Great Britain, Norway.

*Cytheropsis Argus*, Sars, 1865, Oversigt af Norges marine Ostracoder, p. 58.

*Eucythere Argus*, Brady, 1868, Mon. Rec. Brit. Ostrac., Trans. Linn. Soc. vol. xxvi. p. 431, pl. xxvii. figs. 49-51; Brady, Crossk. and Robertson, 1874, Mon. Pal. Soc. p. 183, pl. x. figs. 12-15.

**Eucythere declivis**, Norman, 1864. Glacial, Scotland; Recent, Norway and Britain.

*Cythere declivis*, Norman, 1864, Brit. Assoc. Rep. p. 192; id. 1865, Nat.

Hist. Trans. Northumb. & Durh. vol. i. p. 16, pl. v. figs. 9-12.

*Cytheropsis tenuitesta*, Sars, 1862, Zool. Reise i Sommeren, p. 59.

*Eucythere declivis*, Brady, 1866, Mon. Entom., Trans. Linn. Soc. vol. xxvi. p. 430, pl. xxvii. figs. 22-26, 52-55.

### KIRKBYA, Jones, 1859.

*Kirkbya*, Jones, 1859, Trans. Tynes. Nat. Club, vol. iv.; Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 216; Salter & H. Woodw.

1865, Cat. & Chart Foss. Crust. p. 19.

*Distribution*. Carboniferous and Permian.

**Kirkbya annectens**, Jones and Kirkby, 1866. Carboniferous, Orchard, Craigenglen, Scotland, and Ireland.

*Kirkbya annectens*, Jones and Kirkby, 1866, Ann. & Mag. Nat. Hist. ser. 3, vol. xviii. p. 42, &c.; id. 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 220; Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.

**Kirkbya bipartita**, Jones and Kirkby, 1867. Carb., Orchard, Craigenglen.

*Kirkbya bipartita*, Jones and Kirkby, 1867, Geol. Soc. Glasgow, vol. ii. p. 227; id. 1871, Trans. Geol. Soc. Glasgow, Suppl. vol. iii. p. 28; Armstrong and Young, 1876, Cat. of West. Scot. Foss. p. 44.

- Kirkbya biplicata**, Jones, 1859. Permian, Durham.  
*Cythere (Cythereis?) biplicata*, Jones, 1850, in King's Monog. Perm. Foss. p. 63, pl. xviii. fig. 8.  
*C. biplicata*, Kirkby and Jones, 1859, Trans. Tynes. Nat. Field-Club, p. 160, pl. xi. figs. 5a, 5b.  
*Kirkbya biplicata*, Jones; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 19.
- Kirkbya costata**, McCoy, sp., 1844. Carboniferous, Britain and Ireland.  
*Cythere costata*, McCoy, 1844, Synops. Carb. Foss. Irel. p. 165, pl. xxiii. fig. 11.  
*Kirkbya costata*, Jones and Kirkby, 1866, Ann. & Mag. Nat. Hist. ser. 3, vol. xviii. p. 46; Jones & Holl, 1869, Ann. & Mag. N. H. ser. 4, vol. iii. p. 225.
- Kirkbya Eichwaldiana**, Jones and Kirkby, 1867. Carboniferous, Britain and Ireland.  
*Kirkbya Eichwaldiana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasg. vol. ii. p. 221; Jones & Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.
- Kirkbya fibula**, Jones and Holl, 1869. Upper Ludlow, Malvern.  
*Kirkbya fibula*, Jones and Holl, 1869, Ann. & Mag. N. H. ser. 4, vol. iii. p. 225.
- Kirkbya oblonga**, Jones and Kirkby, 1867. Carboniferous, Brockley.  
*Kirkbya oblonga*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 221; Jones & Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.
- Kirkbya Permiana**, Jones, 1859. Carboniferous, Orchard, Robroyston, Brockley; Permian, Durham.  
*Dithyrocaris Permiana*, Jones, 1851, Mon. Perm. Foss. p. 66, pl. xviii. fig. 1.  
*Ceratiocaris Permiana*, Jones, 1854, Morris's Cat. 2nd edit. p. 103.  
*Leperditia Permiana*, Kirkby, 1858, Ann. & Mag. N. H. 3rd ser. vol. ii. p. 434.  
*Kirkbya Permiana*, Jones, 1859, Trans. Tynes. Club, vol. iv. p. 8, pl. x. a, figs. 1-9, pl. x. figs. 5-13; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 19, fig. 59; Jones, 1869, Ann. & Mag. N. H. ser. 4, vol. iii. p. 225.
- Kirkbya Permiana**, var. *glypta*, Jones, 1851. Permian, Britain.  
*Kirkbya Permiana*, var. *glypta*, Jones, 1851, Mon. Perm. Foss. p. 66, pl. xviii. fig. 8; id. 1859, Trans. Tynes. Field-Club, vol. iv. p. 29, pl. viii. figs. 4-7; id. 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.
- Kirkbya plicata**, Jones and Kirkby, 1867. Carb., Tirfergus Glen, Campbeltown.  
*Kirkbya plicata*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 221; Jones & Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.
- Kirkbya Scotica**, Jones and Kirkby, 1867. Carb., Tirfergus Glen, Campbeltown.  
*Kirkbya Scotica*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 220; Jones and Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.
- Kirkbya spinosa**, Jones and Kirkby, 1867. Carb., Craigenglen, Garple Water.  
*Kirkbya spinosa*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 220; Jones and Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.

**Kirkbya umbonata**, Eichwald, sp. Carboniferous, Russia, Brockley, and Craigenglen.

*Kirkbya umbonata*, Eichwald, sp., Leth. Ross. livr. vii. p. 1347, pl. lii. fig. 10; Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 221; Jones and Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225; Armstrong and Young, 1876, Cat. West. Scot. Foss. p. 45.

**Kirkbya Urei**, Jones, 1859. Carb., Robroyston, Brockley, and Blantyre.

*Kirkbya Urei*, Jones, 1859, Trans. Tynes. Nat. Field-Club, vol. iv. p. 136; Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 220; Jones & Holl, 1869, Ann. & Mag. Nat. Hist. ser. 4, vol. iii. p. 225.

### KRITHE, Brady, Crosskey, and Robertson, 1874.

*Krithe*, 1874, Brady, Crosskey, and Robertson, Mon. Pal. Soc. p. 183.

*Distribution.* Post-Tertiary, Great Britain, Norway. Recent, Great Britain, Norway.

**Krithe Bartonensis**, Jones, 1856. Post-Tertiary, Great Britain, Norway; Recent, Great Britain, Norway.

*Cytherideis Bartonensis*, Jones, 1856, Mon. Tert. Entom. p. 50, pl. v. figs. 2 a, 2 b, 3 a, 3 b.

*Ilyobates pretexta*, G. O. Sars, 1865, Overs. Norg. mar. Ostra. p. 60.

*I. Bartonensis*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 432, pl. xxxiv. figs. 11-14, and pl. xl. fig. 5.

*Krithe Bartonensis*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 184, pl. ii. figs. 22-26.

**Krithe glacialis**, Brady, Crosskey, and Robertson, 1874. Post-Tertiary, Scotland.

*Krithe glacialis*, Brady, Crosskey, & Robertson, 1874, Mon. Pal. Soc. p. 184, pl. vi. figs. 21-26.

### LEPERDITIA, Rouault, 1851.

*Leperditia*, Rouault, 1851, Bulletins Soc. Géol. France, 2<sup>e</sup> série, tome viii. p. 377; T. R. Jones, 1856, Ann. & Mag. Nat. Hist. ser. 2, vol. xvii. p. 84.

*Distribution.* Cambrian to Carboniferous.

**Leperditia amygdalina**, M'Coy, sp., 1844. Carboniferous Limestone, Ireland.

*Cythere amygdalina*, M'Coy, 1844, Synop. Carb. Foss. Ireland, p. 165, pl. xxiii fig. 8.

*Leperditia amygdalina*, Jones and Kirkby, 1866, Ann. & Mag. Nat. Hist. ser. 3, vol. xviii. pp. 43-46.

**Leperditia Armstrongiana**, Jones and Kirkby, 1867. Carb., L. Lias series, East Kilbride, Carlisle, &c.

*Leperditia Armstrongiana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 219; id. 1876, Armstrong and Young's Cat. West. Scot. Foss., p. 45.

**Leperditia? Cambrensis**, Hicks, 1871. Longmynd Rocks, St. David's Head.

*Leperditia Cambrensis*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 401, pl. xv. figs. 15-17.

- Leperditia compressa**, Jones and Kirkby, 1867. Carboniferous shales,  
Craigenglen, Campsie.  
*Leperditia compressa*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii.  
p. 219; id. 1876, Cat. West. Scot. Foss., p. 45.
- Leperditia Hicksii**, Jones, 1872. Cambrian Rocks, St. David's Head.  
*Leperditia Hicksii*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 138,  
pl. v. fig. 16.
- Leperditia oblonga**, Jones and Kirkby, 1865. Carb. Limest. series,  
Carluke and Dalry.  
*Leperditia oblonga*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3,  
vol. xv. p. 407, pl. xx. fig. 5 (Belgian sp.); id. 1867, Trans. Geol. Soc.  
Glasgow, vol. ii. p. 217; id. 1876, Cat. West. Scot. Foss., p. 45.
- Leperditia Okeni**, Münst. sp., 1830. Carb. Limest., Oldtown, Dublin  
and Limerick.  
*Cythere Okeni*, Münst. 1830, Jahrbuch f. Min. p. 65. no. 15.  
*Leperditia Okeni*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3,  
vol. xv. p. 406, pl. xx. figs. 1-3, var. *acuta*, fig. 4; id. 1876, Armstrong &  
Young's Cat. West. Scot. Foss. p. 45.
- Leperditia Okeni**, var. *acuta*, Jones and Kirkby, 1865. Upper and  
Lower Carboniferous, British Islands.  
*Cythere Okeni*, Münster, Jahrbuch für Min. 1830, p. 65. no. 15.  
*C. areolata* (fig. 9), *cornuta* (fig. 10), *elongata* (fig. 13), *Hibberti* (fig. 15), *in-*  
*ornata* (fig. 18), *scutulum* (fig. 21), *oblonga* (fig. 22), *spinigera* (fig. 23),  
*gibberula* (fig. 25), in pl. xxiii. of McCoy's Synopsis Carb. Foss. Ireland.  
*Leperditia Okeni*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3,  
vol. xv. p. 406, pl. xx. fig. 4; id. 1876, Cat. West. Scot. Foss., p. 45.
- Leperditia Okeni**, var. *inflata*, Sby., 1839. U. Coal-measures, West-  
bury and Pontesbury, Shropshire.  
*Cypris inflata*, Sowerby, Sil. Syst. 1839, p. 84, woodcut figs. A 1, 2, 3; id.  
1859, Siluria, 3rd edition, p. 322, fig. 83.  
*Leperditia Okeni*, var. *inflata*, Jones & Kirkby, 1866, Ann. & Mag. Nat. Hist.  
ser. 3, vol. xviii. pp. 36, 37; id. 1876, Armstrong & Young's Cat. West.  
Scot. Foss. p. 45.
- Leperditia Okeni**, var. *Scoto-Burdigalensis*, Hibbert, 1836. L. Carb.  
series, Burdie House; Coal shales, Derry and Tyrone.  
*Cypris Scoto-Burdigalensis*, Hibbert, 1836, Trans. Roy. Soc. Edinb. vol. xiii.  
p. 179; Portlock, 1843, Geol. Report Londonderry, p. 316, t. 24. fig. 13.  
*Leperditia Scoto-Burdigalensis*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist.  
ser. 3, vol. xviii. p. 34.  
*L. Okeni*, var., Jones and Kirkby, 1876, Cat. West. Scot. Foss. p. 45.
- Leperditia Okeni**, var. *subrecta*, Portlock, sp., 1843. Carb. shales,  
Derry, Tyrone, and Fermanagh, Ireland.  
*Cypris subrectus*, Portlock, 1843, Geol. Report Londond. p. 316, pl. xxiv.  
fig. 13b.  
*Leperditia Okeni*, var. *subrecta*, Jones & Kirkby, 1866, Ann. & Mag. Nat. Hist.  
3rd ser. vol. xviii. p. 39; Armstrong & Young, 1876, Cat. West. Scot. Foss.  
p. 45.



- Cythere arcuata*, M'Coy, 1844, Syn. Carb. Foss. Ireland, p. 165, pl. xxiii. fig. 9.  
*C. trituberculata*, id. op. cit. p. 168, pl. xxiii. fig. 24.  
*C. cornuta*, id. op. cit. p. 165, pl. xxiii. fig. 12.  
*C. elongata*, id. op. cit. p. 166, pl. xxiii. fig. 13.  
*C. excavata*, id. op. cit. p. 166, pl. xxiii. fig. 14.  
*C. gibberula*, id. op. cit. p. 166, pl. xxiii. fig. 25.  
*C. Hibberti*, id. op. cit. p. 166, pl. xxiii. fig. 15.  
*C. inornata*, id. op. cit. p. 167, pl. xxiii. fig. 18.  
*C. oblonga*, id. op. cit. p. 167, pl. xxiii. fig. 22.  
*C. scutulum*, id. op. cit. p. 168, pl. xxiii. fig. 21.  
*C. spinigera*, id. op. cit. p. 168, pl. xxiii. fig. 23.  
*C. subrecta*, Portlock, Journ. Geol. Soc. Dublin, vol. ix. p. 48.

**Leperditia parallela**, Jones and Kirkby, 1865. Carb. Limestone,  
 Britain &c.

*Leperditia parallela*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3,  
 vol. xv. p. 407, pl. xx. figs. 6a, 6b.

**Leperditia suborbiculata**, Münster, sp., 1830. Carb. Limestone, Cork.

*Cythere suborbiculata*, Münster, 1830, Jahrb. f. Min. p. 65. no. 16.  
*Leperditia suborbiculata*, Jones and Kirkby, 1865, Ann. & Mag. Nat. Hist. ser. 3,  
 vol. xv. p. 407, pl. xx. figs. 7 a-7c.

**Leperditia vexata**, Hicks, 1871. Cambrian Rocks, Porth-y-rhaw,  
 St. David's.

*Leperditia vexata*, Hicks, 1871, Quart. Journ. Geol. Soc. vol. xxvii. p. 396.  
*Larval Trilobite?*, Jones, 1872, Quart. Journ. Geol. Soc. vol. xxviii. p. 184,  
 pl. v. figs. 17, 18.

**Leperditia Youngiana**, Jones and Kirkby, 1867. Carboniferous shales,  
 Dalry.

*Leperditia Youngiana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow,  
 vol. ii. p. 218; id. 1876, Armstrong and Young's Cat. West. Scot. Foss.  
 p. 45.

**LIMNICY THERE**, Brady, 1868.

*Limnicythere*, Brady, 1868, Monog. Rec. Brit. Ostr. p. 419; Brady, Crosskey,  
 and Robertson, 1874, Mon. Pal. Soc. p. 174.  
*Cythere*, Baird, 1850, Brit. Entom. p. 172.  
*Cypris*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix. p. 45.  
*Distribution*. Post-Tertiary. Recent.

**Limnicythere ? antiqua**, Brady, Crossk. & R., 1874. Post-Tertiary,  
 Scotland.

*Limnicythere ? antiqua*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc.  
 p. 174, pl. xvi. figs. 4, 5.

**Limnicythere inopinata**, Baird, sp., 1850. Post-Tertiary, Scotland,  
 England: Recent, Great Britain, Ireland.

*Cythere inopinata*, Baird, 1850, Brit. Entom. p. 172, pl. xx. figs. 1. 1a-e.  
*Limnicythere inopinata*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 419,  
 pl. xxix. figs. 15-18, pl. xxxviii. fig. 9, pl. xxxix. fig. 1; Brady, Crosskey,  
 and Robertson, 1874, Mon. Pal. Soc. p. 173, pl. x. figs. 8-11.

**Limnocythere monstifica**, Norman, sp., 1862. Post-Tertiary, England ; Recent, England.

*Cypris monstifica*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix. p. 45, pl. iii. figs. 4, 5.

*Limnocythere monstifica*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 420, pl. xxix. figs. 9-12; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 175, pl. ii. figs. 8a-d.

**Limnocythere Sancti-Patricii**, Brady and Robertson, 1869. Post-Tertiary, England ; Recent, Great Britain, Ireland.

*Limnocythere Sancti-Patricii*, Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. ser. 3, vol. iv. pl. xviii. figs. 8-11, pl. xxi. fig. 4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 174, pl. ii. figs. 1-3.

### LOXOCOCONCHA, G. O. Sars, 1865.

*Cythere*, Baird, 1850, Brit. Entom. p. 173; Fischer, 1851, Abhandl. bayerischen Akad. Wissensch. vol. vii. p. 656; Lilljeborg, 1853, De Crustaceis ex ordinibus tribus, p. 168; Zenker, 1854, Anatom.-system. Studien über die Krebst. p. 86; Norman, 1865, Nat. Hist. Trans. Northumb. vol. i. p. 18; Brady, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 190.

*Cytherideis*, Jones, 1856, Mon. Entom. Tert. Form. England, p. 49.

*Cytheropteron*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 449.

*Loxoconcha*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 62; Brady, 1868, Mon. Rec. Brit. Ostrac. p. 433; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 185.

*Distribution.* Crag to Post-Tertiary. Recent, marine.

**Loxoconcha elliptica**, Brady, 1868. Post-Tertiary, Scotland, S. Wales ; Recent, Great Britain, Europe.

*Loxoconcha elliptica*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 435, pl. xxvii. figs. 38, 39, 45-48, pl. xl. fig. 3; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 188, pl. xiv. figs. 23-25.

**Loxoconcha fragilis**, G. O. Sars, 1865. Post-Tertiary, Scotland ; Recent, Great Britain, Norway.

*Loxoconcha fragilis*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 65; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 189, pl. xiv. figs. 30-32.

**Loxoconcha guttata**, Norman, sp., 1865. Glacial and Postglacial, Scotland and Ireland ; Recent, Britain, Levant, &c.

*Cythere guttata*, Norman, 1865, Nat. Hist. Trans. Northumb. vol. i. p. 19, pl. vi. figs. 9-12; id. 1864, Brit. Assoc. Report, p. 192.

*Loxoconcha guttata*, Brady, 1868, Mon. Entom., Trans. Linn. Soc. vol. xxvi. p. 436, pl. xxvii. figs. 40-44; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 186, pl. viii. figs. 5-7.

**Loxoconcha impressa**, Baird, sp., 1850. Post-Tertiary, Scotland, Ireland, Norway ; Recent, Great Britain, Norway, &c.

*Cythere impressa*, Baird, 1850, Brit. Entom. p. 173, pl. xxi. fig. 9.

*C. flavida*, Zenker, 1854, Anatomisch-system. Studien über die Krebsthiere, p. 86, pl. v. B.

*C. rhomboidea*, Fischer, 1851, Abhandl. bayerischen Akad. Wissensch. vol. vii. p. 656.

*C. viridis*, Lilljeborg, 1853, De Crustaceis ex ordinibus tribus, p. 168, pl. xviii. figs. 4-6, pl. xix. figs. 3-5.

*C. carinata*, Brady, 1865, Ann. & Mag. Nat. Hist. ser. iii. vol. xvi. p. 190, pl. ix. figs. 1-4.

*Loxoconcha rhomboidea*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 62.

*L. impressa*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 433, pl. xxv. figs. 35-40, pl. xl. fig. 4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 185, pl. viii. figs. 1-4.

***Loxoconcha multifora***, Norman, sp., 1864. Post-Tertiary, Ireland ; Recent, Great Britain.

? *Cythere hastata*, Egger, 1858, Ostrak. Miocän-Schicht. Ortenberg, p. 32, pl. ii. fig. 6.

*C. multifora*, Norman, 1864, Brit. Assoc. Rep. p. 192; id. 1865, Nat. Hist. Trans. Northumb. & Durham, vol. i. p. 18, pl. vi. figs. 13-16.

*Cytheropteron multiforum*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 449, pl. xxix. figs. 38-42.

*Loxoconcha multifora*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 187, pl. xiv. figs. 11, 12, *a*, *b*.

***Loxoconcha tamarindus***, Jones, sp., 1856. Crag, England; Glacial beds, raised beaches, and Recent, Britain and Norway, &c.

*Cytherideis tamarindus*, Jones, 1856, Tert. Entom. p. 49, pl. iii. figs. 4*a*, 4*b*.

*Cythere levata*, Norman, 1865, Brit. Assoc. Report, p. 192; id. 1865, Nat. Hist. Trans. Northumb. & Durh. vol. i. p. 18, pl. v. figs. 13-16.

*Loxoconcha tamarindus*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 435, pl. xxv. figs. 45-48; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 188, pl. viii. figs. 8-11.

### MACROCYPRIIS, Brady, 1867.

*Cythere*, Münster, 1830, Jahrb. p. 63.

*Cytherina*, Roemer, 1838, N. Jahrb. p. 517.

*Bairdia*, Jones, 1849, Mon. Pal. Soc. p. 25; Bosquet, 1854, Mém. C. C. Géol. Néerl. vol. ii. p. 69.

*Macrocypris*, Brady, 1867; Jones, 1870, Geol. Mag. vol. vii. p. 77.

*Distribution.* Cretaceous and Tertiary.

***Macrocypris? arcuata***, Münster, sp., 1830. Cretaceous and Tertiary, Britain and Europe.

*Cythere arcuata*, Münster, 1830, Jahrb. p. 63.

*Cytherina arcuata*, Roemer, 1838, N. Jahrb. p. 517, pl. 6. fig. 17.

*Bairdia siliqua*, var. *a*, Jones, 1849, Mon. Pal. Soc. p. 25, pl. v. figs. 16*e-g*.

*B. arcuata* (?), Bosquet, 1854, Mém. C. C. Géol. Néerl. vol. ii. p. 69, pl. 5. figs. 3*a-d*.

*Macrocypris arcuata*, Jones, 1870, Geol. Mag. vol. vii. p. 77.

***Macrocypris siliqua***, Jones, sp., 1849. Chalk Marl, Charing; Chalk, S.E. England.

*Bairdia siliqua*, Jones, 1849, Mon. Pal. Soc. p. 25, pl. v. figs. 16*a-d*.

*Macrocypris siliqua*, Jones, 1870, Geol. Mag. vol. vii. p. 77.

### MOOREA, Jones and Kirkby, 1869.

*Moorca*, Jones and Kirkby, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 225.

*Distribution.* Upper Silurian and Carboniferous (Lias?).

**Moorea obesa**, Jones, 1867.

Carboniferous Limestone? (Lias?),  
Somersetshire.

*Moorea obesa* (misprinted *obtusa*), Jones, 1867, Quart. Journ. Geol. Soc. vol. xxiii. pp. 523 & 559; Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 226.

**Moorea silurica**, Jones and Holl, 1869.

Upper Ludlow, Hales End,  
Malvern.

*Moorea silurica*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 226, pl. xv. figs. 8a, 8b.

**Moorea tenuis**, Jones, 1867.

Lias?, Somersetshire.

*Moorea tenuis*, Jones, 1867, Quart. Journ. Geol. Soc. vol. xxiii. pp. 494 & 559; id. 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 226.

**OFFA**, Jones, Kirkby, and Brady, 1874.

*Offa*, Jones, Kirkby, and Brady, 1874, Mon. Pal. Soc., Carb. Entoms. p. 53.  
*Distribution*. Carboniferous Limestone.

**Offa Barrandiana**, Jones and Kirkby, 1874.

Carboniferous Limestone,  
Middleton; Cork.

*Offa Barrandiana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 53, pl. ii. figs. 6a-c.

**PARACYPRIS**, G. O. Sars, 1865.

*Bairdia*, Jones, 1849, Mon. Pal. Soc. p. 25; Bosquet, 1854, Mém. C. C. Géol. Néerl. vol. ii. p. 70.

*Paracypris*, G. O. Sars, 1865, Oversigt af Norges marine Ostrac. p. 12; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 378; Jones, 1870, Geol. Mag. vol. vii. p. 77; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 131.

*Distribution*. Cretaceous and Post-Tertiary. Recent.

**Paracypris? gracilis**, Jones, 1870.

Chalk-marl, Charing.

*Bairdia siliqua*, var.  $\beta$ , Jones, 1849, Cret. Entom., Mon. Pal. Soc. p. 25, pl. v. fig. 16h.

? *Bairdia arcuata*, var. *gracilis* (?), Bosquet, 1854, Mém. C. C. Géol. Néerl. vol. ii. p. 70, pl. v. fig. 4.

*Paracypris gracilis*, Jones, 1870, Geol. Mag. vol. vii. p. 77.

**Paracypris polita**, G. O. Sars, 1865.

Raised beach, Oban: Post-Tertiary and Recent, Norway, Great Britain.

*Paracypris polita*, G. O. Sars, 1865, Oversigt af Norges marine Ostrac. p. 12; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 378, pl. xxvii. figs. 1-4, and pl. xxxviii. fig. 2; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 131, pl. xv. figs. 9, 10.

**PARADOXOSTOMA**, Fischer.

*Cythere*, Müller, 1792, Entomostraca, p. 66; Baird, 1835, Trans. Berwicksh. Nat. Club, vol. i. p. 98.

*Paradoxostoma*, Sars, 1865, Overs. Norg. mar. Ostrac. p. 93; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 457; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 213.

*Distribution*. Post-Tertiary. Recent.

**Paradoxostoma abbreviatum**, Sars, 1865. Post-Tertiary, South Wales, Scotland; Recent, Britain, Ireland, Norway.

*Paradoxostoma abbreviatum*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 94; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 458, pl. xxxv. figs. 22-25; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 214.

**Paradoxostoma arcuatum**, Brady, 1868. Post-Tertiary, Scotland; Recent, W. Ireland, Shetland.

*Paradoxostoma arcuatum*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 461, pl. xxxv. figs. 37, 38; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 217, pl. xvi. fig. 25.

**Paradoxostoma ensiforme**, Brady, 1868. Post-Tertiary, England, Scotland, Ireland; Recent, Britain and Ireland.

*Paradoxostoma ensiforme*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 460, pl. xxxv. figs. 8-11; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 215, pl. x. figs. 27, 28.

**Paradoxostoma Fischeri**, G. O. Sars, 1865. Post-Tertiary, Scotland, Ireland, S. Wales; Recent, Britain, Ireland, Norway.

*Paradoxostoma Fischeri*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 96; Brady, 1870, Nat. Hist. Trans. Northumb. & Durham, vol. iii. p. 363, pl. xii. figs. 1-3; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 215, pl. xvi. figs. 23, 24.

*Sclerochilus* (?) *gracilis*, Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. pl. xx. figs. 11, 12.

**Paradoxostoma flexuosum**, Brady, 1868. Post-Tertiary, Scotland, S. Wales; Recent, Britain.

*Bythocythere* (?) *flexuosa*, Brady, 1867, Brit. Assoc. Report, 1866, p. 211.  
*Paradoxostoma flexuosum*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 461, pl. xxxv. figs. 30-34; Brady and Robertson, 1872, Ann. & Mag. Nat. Hist. 4th ser. vol. ix. p. 55, pl. i. figs. 8, 9; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 216, pl. xvi. figs. 19, 20.

**Paradoxostoma? pyriforme**, Brady, Crossk., & R. 1874. Post-Tertiary, Bridlington.

*Paradoxostoma pyriforme*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 214, woodcut, figs. 1-3.

**Paradoxostoma tenerum**, Brady, Crossk., & R., 1874. Post-Tertiary, Scotland.

*Paradoxostoma tenerum*, Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 217, pl. xvi. figs. 21, 22.

**Paradoxostoma variabile**, Baird, 1835. Post-Tertiary, Glacial beds, raised beaches, Norway, Scotland, and Ireland; Recent, Britain and Norway.

? *Cythere variabilis*, Baird, 1835, Berw. Nat. Club, vol. i. p. 98, tab. iii. figs. 7 a, b, vol. ii. p. 153; id. 1850, Brit. Entomos. p. 170, tab. xvi. figs. 10, 11.

*Paradoxostoma variabile*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 93; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 457, pl. xxxv. figs. 1-7, 12-17, pl. xli. fig. 8; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 213, pl. x. figs. 29-32.

**PHILOMEDES**, Lilljeborg, 1853.

? *Cypris*, Nicolet, 1849, Gay, Hist. fisica y politica de Chile, vol. iii. p. 294.  
*Cypridina*, Baird, 1850, Proc. Zool. Soc. p. 257; Dana, 1855, Expl. Exped. Crust. p. 1294.

*Philomedes*, Lilljeborg, 1853; Norman, 1861; G. O. Sars, 1865, Oversigt af Norges mar. Ostrac.; G. S. Brady, 1871, Proc. Zool. Soc. p. 294; Jones and Brady, 1874, Mon. Pal. Soc. p. 43.

*Distribution.* Carboniferous. Recent, Marine.

**Philomedes Bairdiana**, Jones and Kirkby, 1874. Carboniferous Limest., Little Island, Cork.

*Philomedes Bairdiana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 43, pl. ii. figs. 30, 31 *a*, *b*, *c*.

**POLYCOPE**, G. O. Sars, 1865.

*Polycope*, G. O. Sars, 1865, Oversigt af Norges marine Ostrac.; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 471; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 219.

*Cythere*?, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasg. vol. ii. p. 223.

*Cypridinopsis*, Jones and Kirkby, 1871, Trans. Geol. Soc. Glasg. vol. iii. Suppl. p. 26.

*Distribution.* Carboniferous to Post-Tertiary. Recent, Marine.

**Polycope Burrovii**, Jones and Kirkby, 1874. Carboniferous Limest., Settle, Yorkshire.

*Polycope Burrovii*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 54, pl. ii. figs. 2 *a-c*.

**Polycope orbicularis**, G. O. Sars, 1865. Post-Tertiary, Scotland; Recent, Norway, Britain, Ireland, Spitzbergen.

*Polycope orbicularis*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 122; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 471, pl. xxxv. figs. 53-57; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 219, pl. xii. figs. 22, 23.

**Polycope simplex**, Jones and Kirkby, 1871. Carboniferous Limestone: Little Island, Cork, Meath, Limerick; Isle of Man; Carlisle, Campsie, near Glasgow.

*Cypridinopsis simplex*, Jones and Kirkby, 1871, Trans. Geol. Soc. Glasgow, vol. iii. Suppl. p. 25.

*Polycope simplex*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 54, pl. ii. figs. 1*a-c*, 10, 12, pl. v. figs. 1 *a-d*.

**Polycope? Youngiana**, Jones and Kirkby, 1867. Carboniferous Limest., Campsie, near Glasgow.

*Cythere? Youngiana*, Jones and Kirkby, 1867, Trans. Geol. Soc. Glasgow, vol. ii. p. 223.

*Cypridinopsis Youngiana*, Jones and Kirkby, 1871, Trans. Geol. Soc. Glasgow, vol. iii. Suppl. p. 26.

*Polycope? Youngiana*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 56, pl. v. figs. 2 *a-f*.

**PONTOCYPRIS, G. O. Sars, 1865.**

*Cythere*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix. p. 50.

*Cypris*, G. O. Sars, 1863, Zoologisk Reise i Sommeren 1862, p. 58.

*Pontocypris*, G. O. Sars, 1865, Overs. af Norges marine Ostrac. p. 15; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 385; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 136.

*Distribution.* Post-Tertiary. Recent, marine.

***Pontocypris acupunctata*, Brady, 1866.** Post-Tertiary. Oban, Scotland; Recent, Gt. Britain and Ireland.

*Pontocypris acupunctata*, Brady, 1866, Brit. Assoc. Report, p. 209; id. 1868, Trans. Linn. Soc. vol. xxvi. p. 386, pl. xxv. figs. 53-56; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 137, pl. ii. figs. 18, 19.

***Pontocypris mytiloides*, Norman, 1862.** Post-Tertiary. Scotland, Norway, Germany; Recent, Norway, Gt. Britain, Ireland.

*Bairdia dactylus*, and var. *punctata*, Egger, 1858?, Die Ostracoden der Miocän-Schichten bei Ortenburg, p. 7, Taf. i. figs. 3, 4.

*Cythere mytiloides*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix. p. 50, pl. iii. figs. 1-3.

*C. avena*, Norman, 1865, Nat. Hist. Trans. Northumb. and Durham, vol. i. p. 17.

*Cypris serrulata*, G. O. Sars, 1863, Zoologisk Reise i Sommeren 1862, p. 58.

*Pontocypris serrulata*, G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 15.

*C. hispida*, G. O. Sars, 1865, *l. c.* p. 16.

*C. mytiloides*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 385, pl. xxv. figs. 26-30, pl. xxxvii. fig. 4, & pl. xxxviii. fig. 1; Brady, Crossk., and Robertson, 1874, Mon. Pal. Soc. p. 136, pl. xv. figs. 7, 8.

***Pontocypris trigonella*, G. O. Sars, 1865.** Post-Tertiary, Scotland, Ireland; Recent, Gt. Britain, Ireland, Mediterranean, Cape Verd.

*Pontocypris trigonella*, G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 16; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 387, pl. xxv. figs. 31-34, pl. xxxviii. fig. 3; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 137, pl. xvi. figs. 26-28.

**POTAMOCYPRIS, Brady, 1870.**

*Bairdia*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 474.

*Potamocypris*, Brady, 1870, Nat. Hist. Trans. Northumb. & Durham, vol. iii. p. 366; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 130.

*Distribution.* Post-Tertiary; and Recent.

***Potamocypris fulva*, Brady, 1868.** Post-Tertiary, Dalmauir, Scotland; Recent, Gt. Britain and Ireland.

*Bairdia fulva*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 474, pl. xxviii. fig. 21; Brady and Robertson, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 365, pl. xviii. figs. 1-4.

*Potamocypris fulva*, Brady, 1870, Nat. Hist. Trans. Northumberland & Durham, vol. iii. p. 366, pl. xiv. fig. 4; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 130, pl. i. figs. 20-24.

**PRIMITIA**, Jones and Holl, 1865.

*Primitia*, Jones and Holl, Ann. & Mag. Nat. Hist. 1865, 3rd ser. vol. xvi. p. 415.

"*Beyrichia simplices*," Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. pp. 85, 171.

*Cytheropsis*, McCoy, Brit. Pal. Foss. Camb. 1855; Jones, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. i. p. 248.

*Distribution.* Cambrian, Silurian, and Carboniferous.

***Primitia bicornis***, Jones and Holl, 1865. Lower Silurian, Caradoc, Bala, Harnage, Shrewsbury, Shropshire.

*Beyrichia bicornis*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 173, pl. vi. fig. 23.

*Primitia bicornis*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 420.

***Primitia bipunctata***, Salter, sp., 1865.

Llandeilo, L. Silurian  
Builth. S. Wales.

*Beyrichia bipunctata*, Salter, MS., 1865, Cat. Foss. Mus. Pract. Geol. p. 16.

*Primitia bipunctata*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. vol. iii. p. 229.

***Primitia concinna***, Jones and Holl, 1865. Wenlock Limestone, Dudley.

*Cytheropsis concinna*, Jones, 1858, Ann. & Mag. Nat. Hist. 3rd ser. vol. i. p. 259.

*Primitia concinna*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 424.

***Primitia cristata***, Jones and Holl, 1865.

Wenlock Limestone,  
West Malvern.

*Primitia cristata*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 420, pl. xiii. figs. 1 a, b, c.

***Primitia excavata***, Jones and Holl, 1869.

U. Silurian, Woolhope,  
Malvern.

*Primitia excavata*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 222, pl. xv. figs. 10 a, b, c.

***Primitia lenticularis***, Jones and Holl, 1869.

U. Silurian, Woolhope,  
Malvern.

*Primitia lenticularis*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 219 (woodcut).

***Primitia Maccoyii***, Salter, sp., 1859.

Carb. Limestone, Kildare,  
Ireland.

*Cythere phaselus*, McCoy, 1846, Synops. Sil. Foss. Ireland, p. 58.

*C. Maccoyii* ("Forbes, n. s. ?"), Baily, Descript. Quart.-sheet 35, N.E. Geol. Surv. Ireland, p. 10.

*C. ? phaselus*, Salter, 1859, in Murchison's 'Siluria,' 3rd edit. p. 538, 1867, 4th edit. p. 517.

*Primitia Maccoyii*, Jones and Holl, 1868, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 55, pl. vii. figs. 1 a-c, 2 a, 2 b, 3 a-c.

***Primitia matutina***, Jones and Holl, 1865. Caradoc, Cheney Longville, Shropshire.

*Primitia matutina*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 418.



**Primitia mundula**, Jones & Holl, 1865. Wenlock Limestone, near Malvern.

*Beyrichia mundula*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. pp. 90 & 174, pl. v. fig. 23, and pl. vi. figs. 28-31.

*Primitia mundula*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 419.

**Primitia nana**, Jones and Holl, 1865. Caradoc, Bala, Shropshire ;  
Lower Silurian, Harnage, Shrewsbury.

*Beyrichia strangulata*, var.  $\gamma$ , Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 172, pl. vi. fig. 22.

*Primitia nana*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 420.

**Primitia ovata**, Jones and Holl, 1865. U. Silurian, Ludlow, Abberley  
and Kington, Herefordshire.

*Primitia ovata*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 423, pl. xiii. fig. 13.

**Primitia pusilla**, Jones and Holl, 1865. Wenlock Limestone, near  
Malvern.

*Primitia pusilla*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 424, pl. xiii. figs. 11 *a*, 11 *b*.

**Primitia renulina**, Jones and Holl, 1865. Wenlock Limestone, Crofts,  
Malvern.

*Primitia renulina*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 419, pl. xiii. figs. 5 *a*, 5 *b*.

**Primitia Roemeriana**, Jones and Holl, 1865. Wenlock Limestone,  
Malvern.

*Primitia Roemeriana*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 422, pl. xiii. figs. 8 *a*, 8 *b*.

**Primitia Salteriana**, Jones and Holl, 1865. Lower Silurian. Sholes  
Hook, Haverfordwest.

*Beyrichia strangulata*, var.  $\beta$ , Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 172, pl. vi. fig. 20.

*Primitia Salteriana*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 417.

**Primitia Sancti-Patricii**, Jones and Holl, 1865. Carb. Limestone,  
Chair of Kildare, Ireland.

*Primitia Sancti-Patricii*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 4th ser. vol. ii. p. 53, pl. vii. figs. 4 *a*, 4 *b*.

**Primitia semicordata**, Jones and Holl, 1865. Upper Silurian, Caradoc,  
Sholes Hook, Haverfordwest.

*Beyrichia strangulata*, var.  $\beta$ , young, Jones, 1855, Ann. & Mag. Nat. Hist. vol. xvi. p. 172, pl. vi. fig. 21.

*Primitia semicordata*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 417.

**Primitia seminulum**, Jones, 1855. Upper Silurian. Montgomery.

*Beyrichia seminulum*, Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 173, pl. vi. fig. 24.

*Primitia seminulum*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 418.

**Primitia simplex**, Jones, 1865.Caradoc, Bala; Lower Silurian,  
Harnage, near Shrewsbury.*Beyrichia simplex*, Jones, 1853, Quart. Journ. Geol. Soc. vol. ix. p. 161, pl. vii. fig. 7; id. 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 173, pl. vi. figs. 25, 26, 27.*Primitia simplex*, Jones and Holl, 1865, *ibid.* 3rd ser. vol. xvi. p. 417.**Primitia Solvensis**, Jones, 1869.L. Silurian, Llandeilo Flags, Solva  
Harbour, St. David's.*Leperditia Solvensis*, Jones, 1856, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvii. p. 95, pl. vii. fig. 16; id. 1864, Quart. Journ. Geol. Soc. vol. xx. p. 238.*Primitia Solvensis*, Jones, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 223.**Primitia strangulata**, Salter, sp., 1852. L. Silurian, Coniston, Lancashire.*Beyrichia strangulata*, Salter, 1852, Pal. Foss. Woodw. Mus. Appendix A. p. ii, t. 1 E. fig. 1; McCoy, *ib.* p. 156; Jones, 1855, Ann. & Mag. Nat. Hist. 2nd ser. vol. xvi. p. 171, pl. vi. fig. 18.*Primitia strangulata*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 417.**Primitia strangulata**, var. *a*, Salter, sp., 1852. Lower Silurian, Robeston  
Wathen, Pembrokeshire.*Beyrichia strangulata*, var. *a*, *ibid.* p. 172, pl. vi. fig. 19.**Primitia tersa**, Jones and Holl, 1865.Wenlock Limestone, West  
Malvern.*Primitia tersa*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 421, pl. xiii. figs. 3 *a*, *b*, *c*.**Primitia trigonalis**, Jones and Holl, 1865.Wenlock Limestone,  
West Malvern.*Primitia trigonalis*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 421, pl. xiii. figs. 4 *a*, *b*.**Primitia umbilicata**, Jones and Holl, 1865.Aymestry Limestone,  
Malvern.*Primitia umbilicata*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 420, pl. xiii. figs. 2 *a*, *b*, *c*, *d*.**Primitia variolata**, Jones and Holl, 1865.Woolhope Limestone,  
Wych, Malvern.*Primitia variolata*, Jones and Holl, 1865, Ann. & Mag. Nat. Hist. 3rd ser. vol. xvi. p. 418, pl. xiii. figs. 6 *a*, 6 *b*.**Primitia variolata**, var. *paucipunctata*, Jones and Holl, Ann. & Mag.  
Nat. Hist. 3rd ser. vol. xvi. p. 418, pl. xiii. figs. 6 *c*, 6 *d*.**PSEUDOCYTHERE**, G. O. Sars, 1865.*Pseudocythere*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 88; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 453; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 210.*Distribution.* Post-Tertiary. Recent, marine.

**Pseudocythere caudata**, G. O. Sars, 1865. Post-Tertiary, Scotland, Ireland; Recent, Gt. Britain, Ireland, Norway.

*Pseudocythere caudata*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 88; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 453, pl. xxxiv. figs. 49-52, pl. xli. fig. 6; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 210, pl. ii. fig. 9.

### **RHOMBINA**, Jones, Kirkby, and Brady, 1874.

*Rhombina*, Jones, Kirkby, and Brady, 1874, Carb. Entomos., Mon. Pal. Soc. p. 43.

*Distribution.* Carboniferous Limestone.

**Rhombina Hibernica**, Jones, Kirkby, and Brady, 1874. Carboniferous Limest., Little Island, Cork.

*Rhombina Hibernica*, Jones and Kirkby, 1874, Mon. Pal. Soc. p. 44, pl. ii. figs. 32 a-c, pl. v. figs. 13 a-c.

### **SCLEROCHILUS**, G. O. Sars, 1865.

*Cythere*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix.

*Sclerochilus*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 90; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 455.

*Distribution.* Post-Tertiary. Recent, marine.

**Sclerochilus contortus**, Norman, 1862. Glacial beds and raised beaches, Britain, Norway; Recent, Britain, Norway.

*Cythere contorta*, Norman, 1862, Ann. & Mag. Nat. Hist. vol. ix. pl. ii. fig. 15; id. Trans. Tynes. Field-Club. vol. v. p. 150, pl. iii. fig. 15.

*Sclerochilus contortus*, Sars, 1865, Overs. Norg. mar. Ostrac. p. 90; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 455, pl. xxxiv. figs. 5-10, pl. xli. fig. 7; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 212, pl. x. figs. 33-35.

### **SULCUNA**, Jones, Kirkby, and Brady, 1874.

*Sulcuna*, Jones, Kirkby, and Brady, 1874, Carb. Entomos., Mon. Pal. Soc. p. 36.

*Distribution.* Carboniferous.

**Sulcuna cuniculus**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.

*Sulcuna cuniculus*, Jones, Kirkby, and Brady, 1874, Mon. Pal. Soc. p. 37, pl. iv. figs. 5 a, b, c, 8 a, b, c.

**Sulcuna lepus**, Jones and Kirkby, 1874. Carboniferous Limestone, Little Island, Cork.

*Sulcuna lepus*, Jones, Kirkby, and Brady, 1874, Mon. Pal. Soc. p. 36, pl. iv. figs. 6 a, b, 7 a, b, c.

**Thlipsura**, Jones and Holl, 1869.

*Thlipsura*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol.iii. p. 213.

*Distribution.* Silurian.

**Thlipsura corpulenta**, Jones and Holl, 1869. Woolhope Shale, Wenlock Shale and Limest., Malvern.

*Thlipsura corpulenta*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. vol. iii. p. 214, pl. xv. figs. 1 *a, b, c, d*.

**Thlipsura tuberosa**, Jones and Holl, 1869. Wenlock Shale, Elton Lane, near Ludlow.

*Thlipsura tuberosa*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 214, pl. xv. figs. 2 *a, b, c*.

**Thlipsura v-scripta**, Jones and Holl, 1869. Wenlock Limest., Malvern.

*Thlipsura v-scripta*, Jones and Holl, 1869, Ann. & Mag. Nat. Hist. 4th ser. vol. iii. p. 214, pl. xv. figs. 3 *a, b, c*.

**XESTOLEBERIS**, Sars, 1865.

*Cythere*. Baird, 1835, Mag. Zool. & Bot. ii. p. 143; Lilljeb. 1853, De Crust. p. 169; Zenker, 1854, Anat.-syst. Studien über die Krebst. p. 86.

? *Cytherina*, Reuss, 1850, Foss. Entom. österr. Tertiär-Beckens, p. 57; Egger, 1858, Ostrak. Miocän-Schicht. Ortenburg, p. 17.

*Xestoleberis*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 69; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 437; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 189.

*Distribution.* Post-Tertiary. Recent, marine.

**Xestoleberis aurantia**, Baird, sp., 1835. Post-Tertiary, Scotland, Ireland, S. Wales; Recent, Gt. Britain, Ireland, Holland.

*Cythere aurantia*, Baird, 1835, Mag. Zool. & Bot. ii. p. 143, pl. v. fig. 26; id. 1850, Brit. Entom. p. 171, pl. xxi. fig. 8.

*C. nitida*, Lilljeborg, 1853, De Crustaceis, p. 169, pl. xix. figs. 6, 7.

*C. viridis*, Zenker, 1854, Anat.-syst. Studien über die Krebst. p. 86, pl. v. A.

*Xestoleberis nitida*, G. O. Sars, 1865, Overs. Norg. mar. Ostrac. p. 69.

*C. aurantia*, Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 437, pl. xxvii. figs. 34-37, pl. xxxix. fig. 6; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 191, pl. xvi. figs. 32, 33.

**Xestoleberis depressa**, Sars, 1865. Glacial, Scotland and Ireland; Recent, Britain, Norway.

? *Cytherina tumida*, Reuss, 1850, Foss. Entom. österr. Tertiär-Beckens, p. 57, pl. viii. fig. 29; Egger, 1858, Ostrak. Miocän-Schicht. Ortenburg, p. 17, pl. ii. fig. 11.

*Xestoleberis depressa*, G. O. Sars, 1865, Oversigt af Norges marine Ostracoder, p. 68; Brady, 1868, Trans. Linn. Soc. vol. xxvi. p. 438, pl. xxvii. figs. 27-33; Brady, Crosskey, and Robertson, 1874, Mon. Pal. Soc. p. 190, pl. vii. figs. 13-19.

## Order XI. COPEPODA,

and

## Order XII. RHIZOCEPHALA.

(No Fossil representatives.)

## Order XIII. CIRRIPIEDIA.

**ACASTA**, Leach, 1817.*Acasta*, Leach, 1817, Journ. de Physique, tom. lxxxv.Distribution mundane; imbedded in sponges and the sponge-like bark of *Isis*.  
Coralline Crag, Suffolk.***Acasta undulata***, Darwin, 1854.

Coralline Crag, Suffolk.

*Acasta undulata*, Darwin, 1854, Mon. Pal. Soc. p. 34, t. ii. figs. 6*a*-6*f*.**BALANUS**, auct.*Conopea* (pars generis), Say, 1822, Journ. Nat. Sc. Philadelphia, pt. 2.*Messula* (pars generis), Leach, 1825, Zool. Journ. vol. ii.*Chirona* (pars generis), J. E. Gray, 1825, Phil. Trans. p. 37.*Balanus*, Darwin, 1854, Mon. Pal. Soc. p. 13.

Distribution. Tertiary and Recent.

***Balanus bisulcatus***, Darwin, 1854.

Coralline Crag, Suffolk.

*Balanus bisulcatus*, Darwin, 1854, Foss. Balanidae, Mon. Pal. Soc. p. 26, t. ii.  
figs. 2 *a-h*.***Balanus bisulcatus*, var. *plicatus***, Darwin, *ibid.* fig. 2 *c*. Coralline Crag,  
Sutton, Bolderberg, near Hasselt, Belgium.***Balanus calceolus***, Ellis, 1758.Coralline Crag, Sutton;  
Recent, W. coast of Africa, &c.*Balanus calceolus*, Ellis, 1758, Phil. Trans. vol. i. t. xxxiv. fig. 19; Darwin,  
1854, Fossil Balanidae, Mon. Pal. Soc. p. 15, t. i. figs. 2 *a-d*.***Balanus Chisletianus***, Sowerby, 1823.Lower Tertiary, Grove Ferry,  
near Canterbury, Kent.*Balanus Chisletianus*, Sowerby, 1823, Gen. of Shells; *id.* 1859, Quart. Journ.  
Geol. Soc. vol. xv. p. 134, pl. v. fig. 7.***Balanus concavus***, Bronn, 1831. Red Crag, Sutton; Cor. Crag, Ramsholt,  
&c., Turin, Asti, Tuscany, N. America, and Peru;  
Recent, Panama, Australia, &c.*Balanus concavus*, Bronn, 1831, Italiens Tertiär-Gebilde, et 1838, Lethæa  
Geognost. Bd. ii. p. 1155, t. xxxvi. fig. 12.*Lepas tintinnabulum*, Brocchi, 1814, Conch. Subapp. t. ii. p. 597.*Balanus cylindraceus*, var. *c*, Lamarck, 1818, Animaux sans Vertèbres;  
Darwin, 1854, Foss. Balanidae, Mon. Pal. Soc. t. i. figs. 4 *a-d* p.

**Balanus crenatus**, Bruguière, 1789. Glacial deposits, Scandinavia, &c. ;  
Red and Coralline Crag, Suffolk ; Miocene, Germany :  
Recent, Great Britain, &c.

*Balanus crenatus*, Bruguière, 1789, Encyclop. Méthod. (des Vers) &c. ; Darwin,  
1854, Foss. Balanidæ, Mon. Pal. Soc. p. 23, t. i. figs. 6 *a-g*.

**Balanus dolosus**, Darwin, 1854. Red Crag, Sutton ; Mammaliferous  
Crag, Norwich.

*Balanus dolosus*, Darwin, 1854, Foss. Balanidæ, Mon. Pal. Soc. p. 28, t. ii.  
figs. 3 *a-3 d*.

**Balanus Hameri**, Ascanius, 1767. Red Crag, Sutton ; Glacial deposits,  
Uddevalla, &c. : Recent, British, &c.

*Balanus Hameri*, Ascanius, 1767, Icones rerum naturalium, t. x.

*B. tulipa*, O. F. Müller, 1776, Prodrömus Zoolog. Dan. ; Darwin, 1854, Fossil  
Balanidæ, Mon. Pal. Soc. p. 24, t. i. figs. 7 *a-d*, t. ii. figs. 1 *a*, 1 *b*.

**Balanus inclusus**, Darwin, 1854. Coralline Crag, Suffolk ; Hanover,  
Westphalia.

*Balanus inclusus*, Darwin, 1854, Foss. Balanidæ, Mon. Pal. Soc. p. 31, t. ii.  
figs. 5 *a-5 g*.

**Balanus porcatus**, E. da Costa, 1778. Glacial deposits of Scotland ;  
Mamm. Crag, Norwich ; Red Crag, Sutton :  
Recent, British Seas, &c.

*Balanus porcatus*, E. da Costa, 1778, Hist. Nat. Test. Brit. p. 249.

*Lepas balanus*, Linn. 1767, Syst. Naturæ.

*Balanus tessellatus*, Sowerby, 1818, Min. Conch. t. lxxxiv. ; Darwin, 1854, Foss.  
Balanidæ, Mon. Pal. Soc. t. i. figs. 5 *a-5 g*.

**Balanus spongicola**, Brown, 1827. Coralline Crag, Sutton ; Recent,  
South coast of England, &c.

*Balanus spongicola*, Brown, 1827, Illust. Conch. Great Britain, pl. vii. fig. 6 ;  
id. 1844, 2nd edit. pl. liii. figs. 14-16 ; Darwin, 1854, Foss. Balanidæ, Mon.  
Pal. Soc. p. 16, t. i. figs. 3 *a-3 e*.

**Balanus tintinnabulum**, Linn. 1776. Red Crag, Sutton ; Recent,  
W. coast of Africa, E. and W. Indies, Australia, &c., &c.

*Balanus tintinnabulum*, Linn. 1776, Syst. Nat. ; Darwin, 1854, Foss. Balanidæ,  
Mon. Pal. Soc. p. 13, pl. t. i. figs. 1 *a-1 d*.

**Balanus unguiformis**, J. de C. Sowerby, 1829. Eocene, Isle of  
Wight, &c.

*Balanus unguiformis*, J. de C. Sowerby, 1829, Min. Conch. t. 648. fig. 1.

*B. erisma*, J. de C. Sowerby, id. *op. cit.* fig. 2 ; Darwin, 1854, Foss. Balanidæ,  
Mon. Pal. Soc. p. 29, t. ii. figs. 4 *a-4 f*.

**Balanus unguiformis**, var. *erisma*, Darwin, *op. cit.* fig. 4 *b*.

**CORONULA**, Lamarek, 1802.

*Coronula*, Lamarek, 1802, Ann. du Muséum, t. i.; Darwin, 1854, Mon. Pal. Soc. p. 37.

*Diadema*, Schumacher, 1817, Essai d'un Nouveau Syst. &c.

*Cetopirus* (sed non *Coronula*), Ranzani, 1820, Mem. di Storia Naturale.

*Polylepas*, J. E. Gray (Klein), 1825, Ann. of Phil. (new series), vol. x.

*Distribution*. Red Crag. Recent, living on Cetaceans.

**Coronula barbara**, Darwin, 1854. Red Crag, Bawdsey and Sutton.

*Coronulites diadema*?, Parkinson, 1811, Organic Remains, vol. iii. p. 240, pl. xvi. fig. 19.

*Coronula barbara*, Darwin, 1854, Foss. Balanidæ, Mon. Pal. Soc. p. 38, t. ii. figs. 8a-8c.

**LORICULA**, G. B. Sowerby, Jun., 1843.

*Loricula*, G. B. Sowerby, Jun., 1843, Ann. & Mag. Nat. Hist. vol. xii. p. 260;

Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 81.

*Distribution*. Lower Chalk, Cuxton, near Rochester, Kent.

**Loricula pulchella**, G. B. Sowerby, Jun., 1843. Upper Chalk, Norwich;  
Lower Chalk, Cuxton, near Rochester, Kent.

*Loricula pulchella*, G. B. Sowerby, Junr., 1843, Ann. & Mag. Nat. Hist. vol. xii. p. 260; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. t. v. figs. 1-4.

**POLLICIPES**, Leach, 1817.

*Pollicipes*, Leach, 1817, Journ. de Physique, t. lxxxv.

*Lepas*, Linn. 1767, Systema Naturæ.

*Anatifa*, Brugnière, 1789, Encycl. Méthod. (des Vers).

*Mitella*, Oken, 1815, Lehrbuch der Naturgesch.

*Ramphidiona*, Schumacher, 1817, Essai d'un Nouveau Syst.

*Polylepas*, De Blainville, 1824, Dict. des Sc. Nat.

*Capitulum* (secundum Klein), J. E. Gray, 1825, Annals of Phil. vol. x. new series.

*Distribution*. All over the world, especially in the warmer temperate and sub-tropical seas—attached to fixed, or less commonly to floating, objects. Found fossil in all formations, from the Lower Oolite to the Upper Tertiary beds.

**Pollicipes acuminatus**, Darwin, 1851. White Chalk, Lower Chalk,  
Stoke Ferry, Norfolk.

*Pollicipes acuminatus*, Darwin, 1851, Fossil Lepadidæ, Mon. Pal. Soc. p. 56, t. iii. fig. 6.

**Pollicipes Angelini**, Darwin, 1851. Upper Chalk, Norwich, Kjuge,  
Scania.

*Pollicipes Angelini*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 56, t. iii. fig. 7.

**Pollicipes Bronni**, F. Roemer, 1840. Upper Greensand, Warminster.

*Pollicipes Bronni*, F. Roemer, 1840, Verstein. norddeutschen Kreidegebirges, p. 103, t. xvi. fig. 8; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 77, t. iv. fig. 10.

- Pollicipes concinnus**, J. Morris, 1845. Oxford Clay, Chippenham.  
*Pollicipes concinnus*, J. Morris, Ann. & Mag. Nat. Hist. 1845, vol. xv. p. 30, pl. vi. fig. 1; Sowerby, Min. Conch. pl. 647. fig. 1; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 50, t. iii. fig. 1.
- Pollicipes fallax**, Darwin, 1851. Upper Chalk, Norwich, Hanover; Maëstricht, Scania.  
*Pollicipes fallax*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 75, t. iv. fig. 8.
- Pollicipes glaber**, Roemer, 1840. Upper Chalk, Northfleet, Gravesend, and Charing, Kent; Lower Chalk, Stoke Ferry, Norfolk, Hanover (Roemer).  
*Pollicipes glabra*, Roemer, Norddeutsch. Kreidegebirge, t. xiv. fig. 11.  
*Xiphidium maximum*, J. Sowerby, Dixon's Geol. Sussex, t. xxviii. figs. 6-8; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 61, t. iii. fig. 10.
- Pollicipes ooliticus**, Buckman, 1845. Stonesfield Slate, Inf. Oolite, Eyeford.  
*Pollicipes ooliticus*, Buckman, 1845, in Murchison's Geology of Cheltenham, new edit. t. iii. fig. 7; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 51, t. iii. fig. 2.
- Pollicipes planulatus**, Morris, 1845. Oxford Clay, Christian Malford, and Chippenham, Wilts.  
*Pollicipes planulatus*, Morris, 1845, Ann. & Mag. Nat. Hist. vol. xv. pl. vi. fig. 2; Sowerby, Min. Conch. pl. 647. fig. 2; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 78, t. iv. fig. 11.
- Pollicipes politus**, Darwin, 1851. Gault? loc. incog.  
*Pollicipes politus*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 54, t. iii. fig. 4.
- Pollicipes reflexus**, J. Sowerby, 1829. Upper Eocene, Marine, Colville Bay, Islo of Wight.  
*Pollicipes reflexus*, Sowerby, 1829, Min. Conch. pl. 606. fig. 8; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 58, t. iii. fig. 8.
- Pollicipes Rhæticus**, Moore, 1861. Rhætie Beds, Vallis, Frome, Somerset.  
*Pollicipes Rhæticus*, Moore, 1861, Quart. Journ. Geol. Soc. vol. xvii. p. 512, pl. xvi. fig. 30.
- Pollicipes rigidus**, J. Sowerby, 1836. Gault, Folkestone, Maidstone, Kent, Eastware Bay, Sussex.  
*Pollicipes rigidus*, J. Sowerby, 1836, Trans. Geol. Soc. 2nd ser. vol. iv. pl. xi. fig. 6\*; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 73, t. iv. fig. 7.
- Pollicipes semilatus**, Darwin, 1851. Chalk-marl, Charing, Kent.  
*Pollicipes semilatus*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 72, t. iv. fig. 6.



**Pollicipes striatus**, Darwin, 1851. Upper Chalk, Norwich; Faxoe, Denmark.

*Pollicipes striatus*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 70, t. iv. fig. 5.

**Pollicipes unguis**, J. Sowerby, 1836. Gault, Folkestone, Durham, Eastware Bay, Maidstone.

*Pollicipes unguis*, J. Sowerby, 1836, Geol. Trans. 2nd ser. vol. iv. t. xi. fig. 5\* ; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 64, t. iv. fig. 1.

*P. lævis*, J. Sowerby, Geol. Trans. 2nd ser. vol. iv. t. xi. (fig. 5 only).

### PYRGOMA, Leach, 1817.

*Pyrgoma*, Leach, 1817, Journ. de Physique, t. lxxxv.; Darwin, 1854, Foss.

Balanidæ, Mon. Pal. Soc. p. 35; H. Woodw. 1868, Geol. Mag. vol. v. p. 258.

*Boscia*, Férussac, 1822, Dict. Classique d' Hist. Nat.

*Savignium*, Leach, 1825, Zool. Journ. vol. ii.

*Megatrema*, id. op. cit.

*Adna*, id. op. cit.

*Daracia*, J. E. Gray, 1825, Ann. of Phil. (new series) vol. x.

*Creusia*, De Blainville, 1816-30, Dict. Sci. Nat. pl. cxvi.

*Nobia*, G. B. Sowerby, Junr., 1839, Conchological Manual.

*Distribution.* Upper Chalk and Crag. Recent, British Seas, &c.

**Pyrgoma Anglicum**, G. B. Sowerby, 1823. Crag, Upper Street, near Chislet and Ramsholt; Recent, coast of England, &c.

*Pyrgoma Anglicum*, G. B. Sowerby, 1823 (no. 18, Sept.), Genera of Recent and Foss. Shells, fig. 7; Brown, 1844, Illus. of Conchology (2nd edit.) t. liii. figs. 27-29; Darwin, 1854, Mon. Pal. Soc. p. 36, t. ii. figs. 7<sub>a-7 c</sub>.

*Megatrema (Adna) Anglica*, J. E. Gray, 1825, Ann. of Phil. (new ser.) vol. x.

*Pyrgoma sulcatum*, Philippi, 1836, Enumeratio Molluscorum Siciliæ, t. xii. fig. 24.

**Pyrgoma cretacea**, H. Woodw. 1868. Upper Chalk, Norwich.

*Pyrgoma cretacea*, H. Woodw. 1868, Geol. Mag. vol. v. p. 258, pl. xiv. figs. 1, 2.

### SCALPELLUM, Leach, 1817.

*Scalpellum*, Leach, 1817, Journ. de Physique, t. lxxxv.; Darwin, 1851,

Mon. Pal. Soc. p. 13; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 27.

*Lepas*, Linn., 1769, Systema Naturæ.

*Pollicipes*, Lamarck, Animaux sans Vertèbres.

*Polylepas*, De Blainville, 1824, Dict. des Sci. Nat.

*Smilium*, Leach, 1825, Zoolog. Journ. vol. ii.

*Calantica*, J. E. Gray, 1825, Ann. Phil. vol. x. 2nd ser.

*Thaliella*, J. E. Gray, 1848, Proc. Zool. Soc. Lond.

*Anatifa*, Quoy et Gaimard, 1826-34, Voyage de l' Astrolabe.

*Xiphidium*, Dixon, 1850, Geology of Sussex.

*Distribution.* Cretaceous and Eocene. Recent, marine.

- Scalpellum angustum**, Dixon, 1850. Chalk, Sussex.  
*Xiphidium angustum*, Dixon, 1850, Geol. Sussex, t. xxviii. fig. 9; Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 37, t. i. fig. 2.
- Scalpellum arcuatum**, Darwin, 1851. Grey Chalk, Dover; Gault, Folkestone.  
*Scalpellum arcuatum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 40, t. i. fig. 7; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 27, fig. 14.
- Scalpellum? cretæ**, Steenstrup, sp., 1837. Chalk-marl, Charing, Kent.  
*Anatifera cretæ*, Steenstrup, 1837, and 1839, Krøyer's Tidsskrift, Bd. ii. pl. v. figs. 1-3.  
*Scalpellum? cretæ*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 45, t. i. fig. 11.
- Scalpellum fossula**, Darwin, 1851. Upper Chalk, Norwich and Northfleet, Kent.  
*Pollicipes maximus*, J. Sowerby, 1845, Min. Conch. p. 222, t. 606. fig. 3.  
*Scalpellum fossula*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 24, pl. i. fig. 4; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 27, fig. 16.
- Scalpellum hastatum**, Darwin, 1851. Grey Chalk, Dover.  
*Scalpellum hastatum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 37, t. ii. fig. 13.
- Scalpellum lineatum**, Darwin, 1851. Lower Chalk, Sussex, Maidstone, Kent.  
*Scalpellum lineatum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 35, t. ii. figs. 11, 12.
- Scalpellum magnum**, Darwin, 1851. Coralline Crag, Sutton, Gedgrave, Sudbourne, Suffolk.  
*Scalpellum magnum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 18, t. i. fig. 1; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 27, fig. 19.
- Scalpellum maximum**, Sby. sp., 1829. Upper Chalk, Norwich, Northfleet, Charing, Kent.  
*Pollicipes maximus*, J. Sowerby, 1829, Min. Conch. t. 606. figs. 4 & 6.  
*P. sulcatus*, J. Sowerby, 1845, Min. Conch. t. 606. figs. 1 & 7.  
*P. medius*, Steenstrup, 1839, Krøyer's Tidsskrift, Bd. ii. pl. v. figs. 13, 13\*, 33.  
*P. maximus*, Steenstrup, 1839, Krøyer's Tidsskrift, Bd. ii. pl. v. figs. 17, 18.  
*Scalpellum maximum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 26, t. ii. figs. 1-10; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 27, fig. 17.
- Scalpellum maximum**, var. *typicum*, Darwin, 1851. Upper Chalk, Norwich, Northfleet, Kent.  
*Scalpellum maximum*, var. *typicum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 28, t. ii. figs. 1, 4, 5, 8.
- Scalpellum maximum**, var. *cylindraceum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 28, t. ii. fig. 2.

**Scalpellum maximum**, var. **sulcatum**, Sowerby, 1845.*Pollicipes maximus*, J. Sowerby, 1829, Min. Conch. pl. 606. fig. 2.*Scalpellum maximum*, var. *sulcatum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 34, t. ii. fig. 3.**Scalpellum quadratum**, Dixon, sp., 1845. Eocene, Bognor, Hampstead.*Xiphidium quadratum*, Dixon, 1845, in Sowerby's Min. Conch. t. 648; Dixon, 1850, Geol. Sussex, t. xiv. figs. 3, 4.*Pollicipes quadratum*, J. Sowerby, 1840, Trans. Geol. Soc. 2nd ser. vol. v. pl. viii. fig. 5.*Scalpellum quadratum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 22 t. i. fig. 3; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 27, fig. 18.**Scalpellum simplex**, Darwin, 1851. Lower Greensand, Maidstone.*Scalpellum simplex*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 39, t. i. fig. 9.**Scalpellum trilineatum**, Darwin, 1851. Grey Chalk, Dover; Chalk-marl, Charing, Kent.*Scalpellum trilineatum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 38, t. i. fig. 5.**Scalpellum tuberculatum**, Darwin, 1851. Chalk-marl, Charing, Kent.*Scalpellum tuberculatum*, Darwin, 1851, Foss. Lepadidæ, Mon. Pal. Soc. p. 43, t. i. fig. 10; H. Woodw. & Salter, 1865, Cat. & Chart. Foss. Crust. p. 27, fig. 17.**TURRILEPAS**, H. Woodw. 1865.*Chiton*, De Kon. 1857, Bull. Acad. Brux. 2nd ser. vol. iii. p. 199; id. 1860, Ann. & Mag. Nat. Hist. 3rd ser. vol. vi. p. 97.*Turritepas*, H. Woodw. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 486.*Plumulites*, Barrande, 1872, Syst. Sil. Bohême, Suppl. p. 565.*Oploscolex*, Salter, 1873, Cat. Camb. & Sil. Foss. p. 129.*Distribution.* Upper Silurian.**Turritepas Wrightii**, H. Woodw. 1865. Wenlock Limestone, Dudley.*Turritepas Wrightii*, H. Woodw. 1865, Quart. Journ. Geol. Soc. vol. xxi. p. 486, pl. xiv. figs. 1-6.**VERRUCA**, Schumacher, 1817.*Verruca*, Schumacher, 1817, Essai d'un Nouveau Syst. Class.: Darwin, 1854, Mon. Pal. Soc. p. 41.*Clisia*, Leach, 1817, Journ. de Physique, t. lxxxv.: id. 1824, Encyclop. Brit. Suppl. vol. iii.*Clitia*, G. B. Sowerby, Genera of Recent and Foss. Shells.*Creusia*, Lamarck, 1818, Animaux sans Vertèbres.*Ochthosia*, Ranzani, 1820, Memoire di Storia Nat.*Distribution.* Chalk and Crag. Recent, shores of N. Europe and Britain, also Red Sea.

**Verruca prisca**, Bosquet, 1853. Sémonien, Maestricht; Chalk, Norwich.

*Verruca prisca*, Bosquet, 1853, Monogr. des Crust. Foss. Terr. Crét. de Limbourg, t. i. figs. 1-6; Darwin, 1854, Foss. Balanidæ, Mon. Pal. Soc. p. 43, t. ii. figs. 10 a-10 c.

**Verruca Strömia**, O. Müller, sp., 1776. Glacial Beds, Scotland; Red and Coralline Crag, Essex and Suffolk: Recent, shores of N. Europe, Britain, Red Sea.

*Lepas Strömia*, O. Müller, 1776, Zool. Dan. Prod. no. 3025; id. 1789, Zool. Dan. Prod. vol. iii. t. xciv.

*L. striata*, Pennant, 1777, Brit. Zool. vol. iv. t. xxxviii. fig. 7.

*Die warzenformige Meereichel*, Spengler, 1780, Schriften der Berlin. Gesell. Bd. i. t. v. figs. 1-3.

*Lepas verruca*, Spengler, 1790, Skriften af Naturhist. Selskabet, Bd. i.; Wood, 1815, General Conchology, pl. ix. fig. 5.

*L. verruca et Strömia*, Gmelin, 1789, Syst. Nat.

*Balanus verruca*, Bruguière, 1789, Encyclop. Méth.

*Balanus intertextus*, Pulteney, 1799, Cat. of Shells of Dorsetshire.

*Lepas striatus*, Montagu, 1803, Test. Brit.

*Verruca Strömii*, Schumacher, 1817, Essai d'un Nouveau Syst. Class.; J. E. Gray, 1825, Ann. of Phil. (new series) vol. x.; Darwin, 1854, Mon. Pal. Soc. p. 42, t. ii. figs. 9 a, 9 b.

*Creusia Strömia et verruca*, Lamarck, 1818, Animaux sans Vertèbres.

*Ochthosia Stroemia*, Ranzani, 1820, Memoire di Storia Nat.

*Clisia striata*, Leach, 1824, Encyclop. Brit. Suppl. vol. iii.

*Clitia verruca*, G. B. Sowerby, Genera of Recent and Foss. Shells, pl.

## UNSETTLED AND DOUBTFUL GENERA.

## PHYLLOPODA ?

## CYCLUS, De Koninck, 1841.

*Cyclus*, De Koninck, 1841, An. Foss. p. 591; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17; H. Woodw. 1870, Geol. Mag. vol. vii. p. 554.

*Agnostus*, Phillips, Geol. Yorkshire.

*Distribution*. Carboniferous.

**Cyclus bilobatus**, H. Woodw. 1870. Carboniferous Limestone, Settle, Yorkshire.

*Cyclus bilobatus*, H. Woodw. 1870, Geol. Mag. vol. vii. p. 554, pl. xxiii. figs. 3, 3a; id. 1873, Brit. Assoc. Report.

**Cyclus Harknessi**, H. Woodw. 1870. Carboniferous Limestone, Little Island, Cork.

*Cyclus Harknessi*, H. Woodw. 1870, Geol. Mag. vol. vii. pl. xxiii. figs. 6, 6a, p. 556, woodcut; id. 1873, Brit. Assoc. Report.

**Cyclus Jonesianus**, H. Woodw. 1870. Carboniferous Limestone, Little Island, Cork.

*Cyclus Jonesianus*, H. Woodw. 1870, Geol. Mag. vol. vii. woodcuts figs. 1 & 2, p. 558; id. 1873, Brit. Assoc. Report.

**Cyclus radialis**, Phillips, sp., 1829. Carboniferous Limestone, Bolland, Yorkshire.

*Agnostus radialis*, Phillips, 1829, Geol. Yorks. vol. ii. t. xxii. fig. 25.

*Cyclus radialis*, H. Woodw. 1868, in Brit. Assoc. Report, p. 75, pl. ii. fig. 1; Salter & H. Woodw. 1865, Cat. & Chart Foss. Crust. p. 17, fig. 14; H. Woodw. 1870, Geol. Mag. vol. vii. p. 557, pl. xxiii. figs. 2, 2a.

**Cyclus Rankini**, H. Woodw. 1868. Coal-shales, Carlisle, Scotland.

*Cyclus Rankini*, H. Woodw. 1868, Brit. Assoc. Report, p. 72, pl. ii. fig. 2; id. 1870, Geol. Mag. vol. vii. p. 558, pl. xxiii. fig. 1.

**Cyclus torosus**, H. Woodw. 1870. Carboniferous Limestone, Little Island, Cork.

*Cyclus torosus*, H. Woodw. 1870, Geol. Mag. vol. vii. p. 555, pl. xxiii. figs. 4, 4a; id. 1873, Brit. Assoc. Report.

- Cyclus Wrightii**, H. Woodw. 1870. Carboniferous Limestone, Little Island, Cork.  
*Cyclus Wrightii*, H. Woodw. 1870, Geol. Mag. vol. vii. p. 555, pl. xxiii. figs. 5, 6a; id. 1873, Brit. Assoc. Report.

- Teeth of Crustacean**, 1861 (*Dithyrocaris*?) Ludlow Bone-beds.  
*Astacoderma*, Harley, 1861, Quart. Journ. Geol. Soc. vol. xvii. p. 543, pl. xvii.

## EURYPTERIDA?

- Parka decipiens**, Fleming. (Eggs of *P. anglicus*, &c.) Old Red Sandstone, Forfarshire.  
*Parka decipiens*, Fleming, 1859, Mem. Geol. Surv. mon. i. p. 77, fig. 11.
- Tracks of Crustacean**?, Salter, 1853. Old Red Sandstone of Bouldon.  
*Hymenocaris*?, Salter, 1853, Quart. Journ. Geol. Soc. vol. x. p. 208; Roberts, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 133.  
*Peltocaris*?, Salter, 1863, Quart. Journ. Geol. Soc. vol. xix. p. 92.

## MYRIOPODA?

### KAMPECARIS, Page.

- Kampeccaris*, Page, Adv. Text-book, 1st ed. p. 135; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 8.  
*Distribution*. Devonian.

- Kampeccaris Forfariensis**, Page. Devonian, Scotland.  
*Kampeccaris Forfariensis*, Page, Adv. Text-book, 1st ed. p. 135, fig. 4; H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 8, fig. 1.

### ZOOCAPSA\*, Seeley, 1870.

- Zoocapsa dolichorhamphia**, Seeley, 1870. Lias, Lyme Regis.  
*Zoocapsa dolichorhamphia*, Seeley, 1870, Ann. & Mag. Nat. Hist. ser. 4, vol. v. p. 283.

\* By the kindness of Prof. Hughes, I have had the opportunity of examining the above fossil in the Woodwardian Museum, Cambridge; and after careful comparison, I am inclined to consider the 'tergum' to be the wing of an *Avicula* or *Pecten*, and the underlying 'scutum' to be another portion of the same shell.—H. W.

## APPENDIX.

[The subjoined four species were unintentionally omitted from their proper order.]

## TRILOBITA.

**BRONTEUS**, Burm., 1843.

*Bronteus*, Burm., 1843, Ray Soc. p. 64; Wahl. 1847, Beyr. Trilob. p. 43;  
H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 15.

*Brontes*, Goldf. 1841, Nov. Act. Acad. Cur. vol. xix.; Phillips, 1841, Pal.  
Foss. p. 131.

*Distribution*. Lower Silurian to Devonian.

**Bronteus flabellifer**, Goldf. 1841. Devonian, Newton-Bushel, S. Devon;  
Germany.

*Bronteus flabellifer*, Goldf. 1841, Nov. Act. Acad. Nat. Cur. vol. xix. t. 33,  
fig. 3; Phillips, 1841, Pal. Foss. p. 131, fig. 254; Salter & H. Woodw. 1865,  
Cat. & Chart Foss. Crust. p. 15, fig. 107.

**Bronteus Hibernicus**, Portlock, 1843. Lower Silurian, Ternaskea,  
Tyrone.

*Bronteus Hibernicus*, Portlock, 1843, Geol. Rep. Londonderry, p. 270, t. 5, fig. 8.

**Bronteus laticauda**, Wahl. 1847. Wenlock Limestone and Shale,  
Dudley and Malvern.

*Bronteus signatus*, Phillips, 1841, Pal. Foss. p. 131, fig. 255.

*B. laticauda*, Wahl. 1847, Beyr. Trilob. p. 42, figs. 8, 9.

**DEIPHON**, Barrande, 1850.

*Deiphon*, Barrande, 1850, Haidinger's Berichte, p. 6; Salter, 1859, Siluria,  
2nd ed. pp. 262, 539.

*Distribution*. Upper Silurian.

**Deiphon Forbesi**, Barrande, 1850. Wenlock Limestone, Dudley  
and Malvern.

*Deiphon Forbesi*, Barrande, 1850, Syst. Sil. Boh. p. 814, t. 39, figs. 50-55.

*D. Forbesi*, Barrande, 1850, Haidinger's Berichte, p. 6; Salter, 1859, Siluria,  
2nd ed. pp. 262, 539; id. 1865, Mon. Pal. Soc. pt. 2, pl. vii, figs. 1-12;  
H. Woodw. & Salter, 1865, Cat. & Chart Foss. Crust. p. 13; Murch. 1867,  
Siluria, p. 517.





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